DOCUMENT RESUME

ED 318 370 HE 023 450

AUTHOR Whittaker, David, Ed.
TITLE International Relations, National Policies and Higher Education in the Pacific Region. Proceedings of the 1989 Annual Conference of the Pacific Region Association for Higher Education (10th, La Jolla, California, August 16-18, 1989).
INSTITUTION California Univ., San Diego. Graduate School of International Relations and Pacific Studies.; Pacific Region Association for Higher Education.
REPORT NO ISBN-0-88865-192-9
PUB DATE Feb 90
NOTE 253p.
AVAILABLE FROM David Whittaker, The University of British Columbia, Department of Educational Psychology, Faculty of Education, Vancouver, B.C., Canada V6T 1Z5.
PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC11 Plus Postage.
DESCRIPTORS *Educational Development; *Educational Environment; *Higher Education; *International Relations; International Trade; Leadership; Policy; Social Change; *Technological Literacy
IDENTIFIERS *Pacific Region

ABSTRACT

The conference from which these proceedings is derived explored the issue of higher education in light of national political and social change, and the need for international competitiveness within the Pacific Region nations. The 17 papers are organized into seven topic sessions: (1) Policy Issues Influencing Higher Education in the Pacific Region, (2) Leadership Issues in Pacific Region Higher Education, (3) Educational Change in China, (4) Educational Changes in Japan, (5) Educational Technology in the Pacific Region, (6) Educational Change Related to Southeast Asia, and (7) Educational Changes in the Soviet Union. The keynote address and the presidential address are also included. Papers have the following titles and authors: "Second Thoughts on Higher Education and the Asia-Pacific Century" (Chung Won-shik); "The Role of Science Graduate Programs in the Pacific Region" (Akira Miyake); "The Impact of Civil Government Policies on International Higher Education in the Pacific Region" (Don Williams); "Multicultural/International Policy and Higher Education: A Canadian Case Study" (David Whittaker); "Educating Leadership for the Pacific Century" (Philip J. Bossert); "Leadership in Pacific Region Higher Education: The Problem of Internationalization" (Brent W. Poppenhagen); "Educating Managers for the Multicultural Workforce" (Jean Renshaw); "The Failure of Education Reform in China and the Student Movement as Academic Revolution" (Richard Hartnett); "The Task of Modernizing China: Necessary Changes in Her Educational Ideology" (Harmut Schweitzer); "Adult Higher Education in China: What Role Should Community Colleges Play?" (Yiping Wan); "The Rinkyoshin and Higher Education: Some Tentative Thoughts" (Edward R. Beauchamp); "Will One Have to be Trained 'Nationally' First in Order to be Educated 'Internationally'?" (Akira Tachikawa); "Promises of, Barriers to, and Administrative Strategies for, the Use of Educational Technology in Global and International Education" (Nancy M. Borton); "Computer Communications for International Education: The Future of Teaching in the Planetary Classroom" (Andrew Feenberg); "Progress of Hmong Students in Wisconsin Schools: Implications for Teacher Education" (J. Gordon Nelson); "Management Training Abroad: Do Developing Countries Get Their Money's Worth?" (Jamie Wallin); "Changing Higher Education in Siberia: Soviet Pacific Hopes" (Dale Heckman). (GLR)

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PACIFIC REGION ASSOCIATION FOR HIGHER EDUCATION (PRAHE)

INTERNATIONAL RELATIONS, NATIONAL POLICIES AND HIGHER EDUCATION IN THE PACIFIC REGION

Proceedings of the 1989 Tenth Annual Conference of the
Pacific Region Association for Higher Education
and Co-sponsored by the
Graduate School of International Relations and Pacific Studies,
University of California at San Diego.

La Jolla, California
August 16 - 18, 1989

David Whittaker, Editor
University of British Columbia

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University of British Columbia, Vancouver, B.C.
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ISBN 0-88865-192-9

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U.S.A.

CANADIAN CATALOGUING IN PUBLICATION DATA

Pacific Region Association for Higher Education.
Conference (10th : 1989 : La Jolla, Calif.)
International relations, national policies and higher education in the Pacific Region.

Co-sponsored by the Graduate School of International Relations and Pacific Studies, University of California at San Diego
ISBN 0-88865-192-9

1. Education, Higher - Pacific Area - Congresses. 2. Education and state - Pacific Area - Congresses. I. Whittaker, David, 1931- II. University of California, San Diego. Graduate School of International Relations and Pacific Studies. III. University of British Columbia. Faculty of Education. IV. Title.
LA1253.P33 1989 378'.0091823 C90-091199-9

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ACKNOWLEDGEMENT:

The editor and the association wish to acknowledge the skill, the co-operative, pleasant disposition under pressure, and the professionalism of the word processing services of Ilona St. Anne, Bay Gumboc, Sue Cann, Robyn Moore, Diane O'Shea, and Lori Walker. Their extra efforts were greatly appreciated.

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SECOND THOUGHTS ON HIGHER EDUCATION AND THE ASIA-PACIFIC CENTURY

Chung Won-shik

Minister of Education, Republic of Korea

Introduction

Distinguished scholars and participants of the 1989 Annual Conference of the Pacific Region Association for Higher Education, I am very pleased to be here in San Diego. In past years, members of this association have discussed why the internationalization of higher education had become so important. Last year, in Seoul, valuable ideas were put forward about the significance of higher Education and the Pacific Century. And now the theme for this year's meeting, "International Relations, National Policies and Higher Education in the Pacific Region," provides a rich opportunity to explore, extend and refine what unique features Pacific region nations have in common and what special contributions can be made; how we can further international understanding and co-operation in the higher education sphere. And with these thoughts in mind, I would like to reflect briefly on the growing significance of our Pacific area in international affairs and on thoughts of how to approach this important concern.

1. The Pacific Region in the World Today

Since the end of World War II, fundamental changes have been occurring at different rates in many Pacific Rim nations. At present, the primary focus of attention has been on economic performance in this region, and some of these countries are frequently characterized in the following economic terms. Various useful distinctions can be made: while China and Australia have an abundance of natural resources, such as energy and raw materials, Korea, Taiwan and Japan are rich in educated manpower. In our Pacific family, we have economically well advanced, prosperous members such as the US and Japan as well as enormous disparities in the density of population across the region. Canada, Australia and New Zealand are sparsely populated compared to Japan and Korea. Industrialization has been rapidly developing to the point where there are

common interests and much debate about high-tech, post-industrial trends, and what these emerging concerns mean for the region as a whole.

And vast differences were found between countries in natural resources and in rates of economic development. More significant diversities are also found in the cultures of these nations, that have been shaped each in its own way, over thousands of years. While Japan, China and Korea share a common Confucian culture, with significant variations evolved over centuries, the US, Canada, Australia and New Zealand are predominantly nations of Western culture. The same clear divergences are found in the political sphere. Meanings and interpretations are ascribed to democracy, concensus and popular participation. In our governments, and administrations, even in the languages we speak from Polynesian to Chinese, Spanish to English, there is diversity. While such differences between countries in the Pacific Rim area are commonly known and recognized, the advances in technology, in communications and transportation that have accompanied rapid economic development, have been drawing the region together in time and space.

Recent economic development, the need for raw materials, manpower and expertise have internationalized not only our region but the world at large. Through the increasing interaction between nations by means of sophisticated technology, our gaze is no longer focussed on the village, province or nation as the final parameter in our plans and aspirations. The very survival of one nation has come to entail dependence on other nations. And as we have come to know each other better, as we have become internationalized, mutual dependence has grown in an increasing range of areas, in economics, science, politics, education and culture.

And all of these momentous changes have led to the countries of the Pacific Rim having a common purpose, the desire to co-exist, to work in harmony through the common prosperity of the region. So the meeting of this association could be seen as a subset of broader regional co-operative initiatives. This conference testifies to a common belief and commitment in the importance of foregoing stronger ties between Pacific Rim countries and recognizes the strategic role of higher education in the economic, social and political development of the region.

Universities and colleges in this region have continued to play two vital roles in creating and promoting the Pacific Region to the forefront of human affairs today. Not only have they been responsible for the research and teaching of the increasingly skilled and specialized manpower required by the new economic order, they have also been endeavouring to respond to rapid social change and the whole variety of adjustments necessary in an increasingly complex environment. In seeking to fulfill these roles effectively, and by the very nature of the tasks they have to accomplish, they have played their part in bringing the Pacific Rim countries together towards a better understanding of each other and closer co-operation. Regional studies programmes, co-research, faculty and student exchanges between countries are increasing and expanding. It is these kinds of initiatives that are fostered through conferences such as this one. And as the variety of mutual relationships strengthen, higher education in our region will surely be effective in meeting the challenge not only of internationalizing itself but of working in co-operation on a global scale as well.

2. Common Features of Educational Development in Asia.

Now, as one of the tasks before us is to strengthen mutual relationships between our Pacific Rim nations, there are certain experiences and some concepts that the Asian nations in the Pacific region have had in common over time in their educational development. I would like to offer some ideas derived from this common heritage and stemming from my own perspecture as a Korean educator.

In the recent past, Asian countries were viewed as backward, under-developed and poverty-stricken. With more than 50% of the world's population living in these areas, it has been only over the last five decades that some Asian nations have come to play key roles in world affairs. Today, some of these countries, for example, Japan, Taiwan, Korea and Singapore have become major trading partners with other Pacific Rim nations and internationally. Their progress has been an important indication that the era of the Pacific has replaced the era of the North Atlantic. From poverty, division and conflict to prosperity, harmony and co-existence, education has played a key role in this process of change.

While accepting the vastness and diversity of the Asian continent and the concomitant variations in the structures and functions of different educational systems, the oriental way of viewing education helps to identify and explain Asian patterns of development in the field. While education is used to train the producers of goods and services, to socialize and civilize human beings, in the oriental view, there is the need to add that being human is intrinsically valuable and education is a satisfying end itself for human beings. The importance of, and commitment to, education is the keystone of Confucian culture. This view of education, as exemplified in the Chinese Classics, has remained valuable and is a dominant feature of many Asian societies today.

Education is seen, then, as an integral part of being human. In oriental societies not only do educators try to instill particular Confucian ideas about self-fulfillment but also recognize the importance of education as one of the great joys of life. The creation of this hunger for learning can stimulate and encourage the development of new ideas. Education is the process used by human beings in their endless quest for ideas and means to implement them. This quest for ideas can lead to creativity that is essential to change and development. This is applicable not only in Asian societies but in all societies around the globe. Furthermore, educationalists in all our universities and colleges are presently very much preoccupied with rapid change and development as we move towards the 21st century.

At this time, as Pacific neighbours in the 1980's, we share a number of common concerns in our higher education system which I would like to reflect upon with you, from a Korean perspective.

3. Common Concerns as Seen from a Korean Persepective

As has been said many times before, Korea has achieved an economic miracle over the last twenty years. With the achievement of a high growth rate, the Korean economy is taking an increasingly important part in international trade. So many problems associated with new technology have to be faced, along with the competitiveness of international trading marts. Consequently, the idea of competitiveness has come to permeate most aspects of Korean society. The higher education sector has had to seriously consider these challenges and is now beginning to pay more attention to quality and excellence in higher education.

But prior to these recent initiatives, this modern system of higher education had to be restricted and reorganized since the nation's independence from Japanese occupation in 1945. Remarkable quantitative growth during these years has brought with it many policy changes and experimentations. Since the early 1960's, higher education has been regulated and controlled by the government of the day. Therefore, planned change and co-ordinated development has been a key instrument in the evolution of higher education.

Recently, however, these directions have been frequently criticized. After the establishment of the Presidential Commission for Educational Reform in 1985, there have been many discussions concerning governmental control and efficiency-oriented policy directives. This need for stringent control came to be challenged. As a modern industrialized society that is meeting the challenges of a new era, it needs more initiatives and creativity in all spheres of the society. So individual institutions required the freedom to govern themselves in order to take responsibility for meeting change and transformation rapidly and innovatively.

Autonomy in the higher education sector became an irresistible task for government and institutions alike. It is to be hoped that our universities and colleges will continue to play this strategic role as harbingers of constructive change in the future.

And yet even though progress has been made, Korean higher education still faces some difficult turning points. Quality and excellence in higher learning has to be pursued simultaneously with the granting of autonomy to institutions. We are facing some very difficult tasks at this turning point: quality and excellence on one side and institutional autonomy and accountability to the society on the other. I believe these are concerns that preoccupy the minds of many educationalists in other Pacific Rim countries.

Compared to universities and colleges in Western nations both within and outside the Pacific region, Korean higher education has been more consistently involved in playing a significant political role. This political role was played actively at times when the political system failed to respect the need and popular desire for the implementation of democratic principles. Over the last twenty-five years, university students have been the most active political group in making demands for greater measures of popular participation. Their challenge brought about constitutional change in 1987 and a pledge by the new

government to give the development of a democratic system high priority. But at other times, student activism has been destructive and violent. It has led not only to the disruption of academic programmes but has had a destabilizing effect on the whole society.

In Korea, we have tried to map out a policy-guidelines to deal with these concerns. I would now like to discuss the goals and policy tasks in higher education with you.

4. Policy Directions and Major Recommendations made by the Presidential Commission for Education Reform

This commission formulated a set of policy directions and tasks with four key concepts: Excellence, Diversity, Autonomy and Effectiveness. Within the policy framework, six areas were recommended as priority tasks. It was recognized that research and development efforts are required to plan feasible and effective programmes for policy implementation.

a. Functional Diversification and Specialization of Universities:
Redefining proper roles and functions among types of higher educational institutions:

(1) Specialization of technical colleges into two categories:
- Vocational oriented technical colleges.
- Community college as types for short-cycle higher educational institutions.

(2) Diversification of college-universities into several forms of higher educational institutions:
- Research university.
- Graduate program-centered university.
- Undergraduate program-centered university.

(3) Flexibility needs to be built into the duration of programs, with the introduction of accelerated graduation, enabling competent students to graduate earlier. Academic terms should be varied by introducing a trimester or quarter system. To enlarge opportunities for continuing education, it is necessary to make registration flexible and open part-time courses that are convenient for students. The desirability of combining night and summer courses with daytime courses deserves consideration so that credits may be earned at any time.

b. Enrollment Quota in College admission:

Enrollment quotas for universities have been controlled by the government. PCER (the Presidential Commission for Education Reform) proposed that the government's control on enrollment quotas should be more limited towards allowing universities more freedom in determining the size of their enrollment:

(1) It is recommended that the Ministry of Education controls the total size in each area of specialization and universities should be allowed to decide the enrollment in each program.

(2) When Accreditation and external evaluation is fully institutionalized, the decision on the enrollment quota will be left to colleges and universities.

c. The Reform of the Entrance Examination for Admission to College and Universities:

Two policy changes were recommended by PCER:

(1) By the early 1990's universities will be given autonomy in the selection of their own students, and each institution has to develop its own screening methods and procedures.

(2) Under the "Autonomy of the University Education Program" each university will decide the kinds of evaluation criteria and will be encouraged to develop its own entrance examination system.

d. Curriculum Relevance and Individualized Instruction:

The program development in higher education should be based on the continued efforts of research and development to ensure relevance. Instruction should be individualized as much as possible to meet the diverse needs of individual learners:

(1) The junior colleges should diversify their programs so as to meet the differing educational needs of society, while the universities should reflect a balanced representation of academic vs. professional programs and the required vs. elective subject content, according to the characteristics of each discipline.

(2) The curriculum should ensure a vertical and horizontal linkage of content. The general studies of the university should be linked to the curricula of high schools, and specialization programs to those of graduate schools.

(3) Flexibility should be built into the operation of the curriculum, in order to overcome barriers between departments. Disciplines should be reclassified into broad fields of studies in the direction of integrating similar disciplines.

(4) Teaching methods should be diversified and efforts should be made to utilize various methods in educational technology.

e. Improvement of Educational Conditions:

Educational conditions need to be improved to encourage research by faculty members and to keep students motivated:

(1) The graduate school should strengthen its role in supporting the research capabilities of faculty members, while a special program of faculty development for junior colleges should be built into the graduate studies.

(2) Teaching loads should be optimized at a level that allows faculty members to do more research. Recommendations include the increase in TA/RA support and the introduction of Research Professorships.

(3) The recruitment of faculty members should be given publicity so that it is done on an open, competitive basis. Meritocracy should be introduced as the basis for faculty recruitment and promotion.

(4) The standard requirements for facilities should be adjusted by introducing a new set of criteria. The library and information management systems should be expanded and modernized.

(5) In order to reduce the gap of education quality among educational institutions, the government should increase its subsidy for private and local universities.

(6) Policy measures should be developed and implemented to improve services to students. Tuition exemption and scholarships should be expanded in particular to assist needy students.

f. Administrative and Financial Support:

To provide adequate support, efforts should be made to professionalize administrative personnel, introduce modern management techniques, and strengthen evaluation procedures:

(1) An inter-university and university-industry cooperative system should be created to facilitate the sharing of resources and the exchange of expertise.

(2) Autonomy should be granted to universities to encourage creative approaches to major managerial issues. The Ministry of Education should delegate as much as possible of its functions to universities.

(3) The planning function of universities should be strengthened and the university's administrative personnel should be sufficiently skilled to bring about planned changes in administration. Up-to-date management techniques should be introduced.

(4) A new fund for higher education development should be created to provide systematic support over the long term.

(5) The determination of tuition fees should be left to the discretion of private universities. Policy measures should be enacted to invite contributions from the private sector.

(6) An inter-university cooperative system should be created to facilitate the sharing of resources and facilities and joint research.

(7) Links between universities and industry should be developed on a mutually cooperative basis. Industries should be encouraged to participate in establishing new junior colleges.

As you can see, we need to develop realistic guidelines for educational reform and have the broad-based public support necessary for their achievement. The PCER's recommendations on policy directions and tasks seem to suggest the position that Korean higher education has to research by the 1990's. Just as we share some common concerns about higher education, we find that some of the recommendations made by the Presidential Commission have been made in other countries, too. We are all trying to develop new ideas about education. This becomes more likely if the education process is made more efficient and is open to everyone. If we put the concerns and the hopes that we each have for our own rational higher education systems, then we have a lot in common. Not only do we find that the Pacific nations are interdependent economically but there is the potential for us to develop interdependence in the higher education field.

But this interdependence can only work for us all if we can perceive the opportunities for new co-operative initiatives as they open before our eyes. It can be done if we plan strategies now for the development of a global understanding. In each of our contemporary societies, institutions of higher education can play the role of facilitating cooperation among different nations regionally and internationally. In planning a framework of strategic thinking,

there are certain lessons to be learned about cooperative educational development. These may enable us to search for new long-term opportunities beyond the immediate constraints of today.

5. Lessons From a Framework of Strategic Thinking

The future is uncertain and we cannot forecast what is going to happen. This makes it very difficult for us to make decisions about forward-planning. The chance factor or "luck" offer seems to dominate the outcome of our efforts. The chance or luck is a happening or event which is independent from the past, human will, and causal relations. One of the lessons from strategic thinking in this time-dimension can be the transformation of chance into the inevitable. Everything has a probability factor. For example, if we try many, many times, whatever it is that we want, very likely it will happen. Therefore, chance can become certainty when it is subjected to a large number of trials, or the law of large numbers. We could accomplish our goals and realize our dreams if we mobilized our energy and try to achieve them many, many times. To make the efforts, we need to have a strong faith in the value of what we want to achieve, the need to be ready to take risks, even to be naive, simple and honest at times. Such efforts require long-term perspectives and with these long-term perspectives we can overcome indecision based on limited calculations of more immediate tangible returns.

The time dimension of this strategic thinking can indicate another idea, that the indirect approach is more effective in achieving our goals than the direct approach, because more power and productive capacity develops in the course of an indirect approach. The roundabout production theory in economics is a case in point. To create more economic power, higher productivity is only possible by sacrifice in the present. While it is difficult to find the optimal degree of indirectness, it is very clear that the longer the time perspective, and the more that is invested in the present, then the more effective the indirect approach is. The Japanese are well-known for their efforts in preparedness and the indirect approach. Preparation means accumulation of capacity at the cost of satisfaction in the present.

However important the long-term perspective is and however good the indirect approach is, all of this is meaningless if we fail to survive and continue our efforts. All of us are subject to the law of the survival of the fittest. In this situation where we have to optimize the objectives under given

technically interdependent relationships and resource constraints, we learn that in order to achieve our objectives, total optimality rather than sub-optimality is necessary. There is the requirement to have freedom and equality in order to capitalize on each individual potential contribution, and to have an unavoidable evaluation of the net contribution of individuals concerned to the total optimality.

In order to approach the objectives satisfactorily, every potential contribution should be considered. This means that opportunity should be expanded and given equally to all participants. However, the outcome of this type of equal opportunity should be evaluated by efficiency criteria. Oriental thinking puts the highest value on harmony. And harmony is required if any of our co-operative efforts are to work.

In Chinese culture, being a human being means having humanity between humans. Humanity and interdependence are the keys. Everything is viewed in terms of interdependent relations. Each should be in harmony with the other: between men and women, past and future, top and bottom, between emperor and people. I believe that we could search for new possibilities to overcome any conflict of interests by fostering a spirit of interdependence and togetherness.

6. Implications for Educational Developments at the Regional and International levels

What do all these notions mean for the development of higher education in the Pacific region?

a. The development of higher educational systems and cooperation among them should be viewed in the long-term perspective. We will be able to take this long-term perspective when we have a better, stronger faith in education. That is why I argued that the development of new ideas in education is the most important dimension for educational development. With long-term perspectives, we can overcome indecision and simplistic solutions that have been based on limited calculation. Also, we would be able to realize an image of educational development by transforming chance into the certainty of continuing efforts. I happen to recall what Harvison and Myers say in their study of "Education, Manpower and Economic Development." They observed a close relationship between the level of education attainment of

the school age population and the level of economic development, based on data from 75 countries. They indicated that Korea was an exceptional case in high educational attainment and low economic development. Perhaps, a short-sighted view or short-term perspective of education was operative. They may have missed the point that it takes more than 20 years to bring in the educational fruits. This time lag certainly affects education.

We may be tempted to plan and implement some new activities right here and now. However, slow but steady will be ultimately the short-cut for development and cooperative international relationships among higher educational systems in the Pacific Region.

b. The idea of "Higher Education and the Asia-Pacific Century" came out of the emerging economic realities of the Pacific Rim age. We have the temptation to see education, higher education, in the context of economic-political cooperation, and this exchange made towards common economic prosperity. That is fine. The notion of education for something, emphasizing pay-off values of education is quite necessary. However, I would take the position of seeing education beyond this instrumentality-orientation.

Education is one of the best strategies taking the indirect approach for development of the nation or the region. With this indirect approach, our educational efforts should be able to accumulate more power and energy in the educating process. This can be done by orienting this process towards self-renewal and innovation. More emphasis should be given to the intrinsic values of education which should lead us to find more alternatives. Quality education and a creative search for interdependent educational development should be designed in this context.

Continuing regional economic cooperation and sound cooperative linkages in the higher education sectors of the Pacific Rim nations require a good "Educational Infrastructure." Perhaps, we could build a better infrastructure by not paying too much attention to immediate returns.

c. Education should be a dynamic process within which equality and efficiency apply. Education should be equal to all but each should be evaluated and guided by efficiency criteria. Choices should be made in a dynamic-cycle one after the other.

d. Efficiency and equality should be in harmony in the educative process but there needs to be unity as well as harmony in the process of social change. We need to design more humanistic ways of living and ways of helping and taking care of each other through ideas of humanity and interdependence.

The philosophy underlying all the objectives in Korean education can be encapsulated in a basic and yet broad philosophical concept dating back to Korean mythology, Hong Ik In Gan, which can be loosely translated as human beings contributing to the good of everyone. I hope this conference will lead to the production of valuable ideas on how we can cooperate together for the benefit of all our nations in the Pacific Region.

The future of educational development in the Pacific Region is dependent on the choices we make now. There are new and bright possibilities for all of us in the 21st century. I hope that our Asian culture with its commitment to education, to long-term perspectives, and the pursuit of humanity and harmony can help to shed a brighter light on all of our discussions.

Thank you.

PRESIDENTIAL ADDRESS

Joon Hee Park

Ewha Woman's University, Republic of Korea

In reflecting on the 20th century, we can easily understand that there were many problems and developments. The problems will be classified into two categories. One will be the two times of World War and some other local struggles. The other will be the so serious conflicts of philosophies of life and values. These two would be understood as the negative and undesirable aspect of human affairs. The developments here mean the economic and technological developments and the improvements of the standard of living based on the economic and technological development and it will be understood as the positive side.

From the standpoint of the positive side, we shall have to reflect, in thinking of the problems and developments as mentioned above, the two times of World War and some struggles. As we may suppose and understand, World War I was provoked by the misdirected philosophy of way of life. Fundamentally speaking, the war broke out on the basis of narrow-minded patriotism which had been germinated for a long time through the struggle of nations to pursue their own national prosperity only. This, as we know, had brought various destructions in every field of life. After that many nations had reflected about the things which lead to the human goodness and the world peace. Therefore, most of the nations directly had gathered and talked about the world peace. They had tried to have some organization for it and finally created the so-called League of Nations. Through its organizational activities, they had tried to realize the improvement of mutual understanding, mutual cooperative benefit and keep their own cultural heritages. However, deeply rooted national egoism had more strongly acted and appeared and then the total philanthropic mind which might be developed had not been and, for a long time, not well realized due to strictly fixed nationalism in the narrow sense. Therefore some such nations had begun to separate from the philosophy of the League of Nations and they had begun to

withdraw from the League and some years later the League of Nations could not function well according to the philosophy of the organization.

After that every nation had turned to concentrate its own interest and to hardening its own national basis and power. On the other hand, in accordance with the development of natural sciences, industries and technologies, the philosophy of socio-economics system had separated into two systems of philosophies of economics. One is capitalism which had existed and the other is socialism which had been germinated in the underdeveloped and ruled classes because of lack of ability or unreasonably structured conditions of economic life as theorized by Karl Marx. This divided stream had brought the emotional frustrations or conflicts between able and unable, rich and poor, ruling and ruled, superiority complex and inferiority complex. Such frustrations or conflicts had been connected to the political and ideological strategies such as expansionism and isolationism, open-mindedness and close-mindedness, which would be expressed in terms of nationalism, totalitarianism, protectionism, liberalism and so on. These kinds of ideological philosophy had their own preoccupation which would be called a fixation that would not open their mind to others and would emotionally bring misunderstanding because of this defense mechanism of psychology. They had made up their own education only in their egoistic fixation which might have been called the so-called narrow-minded patriotism. After all, this tendency had made their own philosophies to be confused and mixed ones with many kinds of factors of national socialism, totalitarianism or dictatorship.

And it had made people confuse those philosophies of politics and they could not discriminate and explain what is this or what is that. They could also not understand the others and had not become to like to understand others. Such situations had made themselves be a downfall in the extremely confused and unreasonable mental and behavioral situations. In other words, they had become not able to handle and judge things well in coordination with their own thinking and behavior and so finally they had fallen down into the struggles of a very confused situation. That was World War II which was based on these misleading philosophies. The war was so serious but it fortunately finished in 1945 with world peace. Then, the United Nations had been organized for the preservation of permanent peace on this earth and the headquarters had been built in New

York, site of the Statue of Liberty of freedom. The functions of the United Nations had well been done by so many people from many countries, but we were very sorry to see that three years later it had changed into an organization of powerless discussions with the divided philosophies and ideologies of socialism, totalitarianism, capitalism and individual liberalism.

Consequently it had brought about the serious competition of disarmament and re-armament. Again this had been connected to the so-called industrial-military complex and there it had escalated the production of the weapons and selling of weapons as trade in a link of economic competition.

In contrast to this tendency, the econo-technological competitions and development had also been accelerated here and there. First of all nuclear weapons and space development had been highly revolutionally and appeared not for peace but mainly for military purposes and through it, the competition of technological development had been stimulated. Consequently, this also had stimulated the economic and technological development and standard of living, particularly between the super powers.

Under these circumstances, some delayed or underdeveloped nations had been encouraged in the heightening of their own standard of living conditions through the introduction of technologies from the advanced countries, academically and practically. Therefore, for a long time, they had tried to send as many young students as possible to the advanced countries to learn and therefore introduce the advanced theories and practices to their own mother countries for industrial developments. Then ten to twenty or thirty years later, they had begun to catch up with the advanced countries. Through these trials, some countries have been able to climb up to almost similar standards academically and practically. They had come to enjoy their own life at almost the same level and style of living conditions in relation to the materialistic sides. Japan will be the best well known example among those countries. Some other countries have followed Japan or some other existing advanced countries. Some of them are in the Asian area called NIES. As we well know, Japan already has advanced to the same level of America in her per capita income and became one of the G-7 member countries. The NIES also eagerly have tried to follow Japan, America and other advanced European countries. Therefore Japan and NIES in Asia have become the center of the interests of the advanced and developing countries. This would be

understood as an unexpected but desirable new change in a good sense. This also means a desirable development in the sense that they would be able to cooperate with the advanced countries in the conditions of equal and coexistential circumstances.

As we well understand, this would be a sign and symbol of the historical development of the world, a symbolical transition in the world history. In other words, it would be understood as a new transitional but very hopeful symptom at the beginning of the enjoyable 21st century instead of 20th century where human beings had to experience very serious and painful conditions.

In relation to this, one more hopeful symptom has appeared. This is the so-called gradual change of the situations of the socialistic block. After the death of Mao, China has begun to open her door to introduce the liberal way of life. Soviet Union also has been changed in the name of Perestroika and Glasnost. In addition to this change, some other east European countries have begun to open their doors. These would be hopeful changes which would be expected to make up the new direction and philosophy of human life and at the same time would be expected to bring new reconciliations in the world. As we well know and already suggested above, the two divided philosophies have brought the serious cold war, nevertheless most of the people have prayed for the world peace even after the United Nations had been organized. Fortunately, many people and many politicians did not disappoint us and continuously tried to realize peace. Then the east socialistic block has started to open their door gradually. This would be understood as one of the promoting symptoms to escalate the opening the Age of Pacific Asia. At the same time, it will mean that they are going to stop closing the door and bring harmonizations with others. In other words, it will also mean bringing the so-called concepts of internationalization and so it will suggest that they will try to make national policy be relevant to these directions for cooperative and equal prosperity.

In thinking of these tendencies, it will mean that many of these have been from desirable developments and changes of ways of thinking through education from the early stage to the higher. In relation to this, we can newly understand the importance of education in both mind and behavior in connection with practical daily life.

I would like to mention the importance of education, particularly higher education, because it will perform the direct promoting role in bringing the hopeful era of the Pacific Asia. In these connections, we are very happy to have the Pacific Region Association for Higher Education Conference under the theme of the "International Relations, National Policies and Higher Educations in Pacific Region." As we find out in the excellent program, so many research papers will be presented in this hopeful direction during the compact schedule. Finally, I have to express my deep thanks to the executive committee who have made up this program and at the same time the University of California at San Diego, and the Graduate School of International Relations and Pacific Studies of this university, whose courtesies made it possible here to enjoy and get a fruitful harvest. I would like to thank all of the enthusiastic members from many countries for making the hopeful age. Also I will express my hope for the next conference of 1990 in New Zealand in continuing to make a more progressive meeting year by year.

THE ROLE OF SCIENCE GRADUATE PROGRAMS IN THE PACIFIC REGION

Akira Miyake

International Christian University, Japan

(1) The Pacific Region is characterized by strong economic growth at the moment and the peoples of the constituent nations of this region are strongly and enthusiastically aware of both the economic and educational factors pertaining to this growth. In addition to the existence of two economic superpowers, the United States and Japan, the western parts of the region, e.g., the Asian NIES of the Republic of Korea, Taiwan, Hong Kong and Singapore and the ASEAN countries of Thailand, Malaysia, Philippines, Indonesia, etc., presently exhibit high growth rates in both their economic and social development.

Such high growth rates are no doubt closely related to rapid developments in science and technology and also to underlying advancements in higher education. However, the question is whether existing science and engineering graduate programs respond to this growth in ways relevant to the social needs of the region.

(2) Science graduate programs generally absorb a large proportion of available financial resources, their development is inevitably hindered by various factors. Statistics of the number of graduate students (Tables I and II)[1] reflect differences in the size, area emphasis and academic level of the programs depending on the socio-economic situation in each country. Some countries such as China and Korea are still very much dependent on overseas institutions for training of their high quality scientists and engineers (Tables III and IV).[1,2] This international aspect of graduate training can be seen as reflecting the nature of science, itself. Science only deals with natural phenomena which have universal validity, meaning that such phenomena are accessible to anyone at any place and at any time under appropriate, specified conditions. Therefore, science graduate programs should be international in principle. However, the reality is a different matter for science is regarded

as closely linked to engineering and technology. The problems of graduate programs in developed countries are analyzed in an OECD report[3] which points to the decline in the growth rate of higher education, changes in the composition of the student body, the employment prospects of graduates, and more restricted funding of graduate programs. However, problems in the Pacific Region, excluding developed countries, seem to be different from those described in the OECD report and their solution may require somewhat different strategies as a result.[4]

(3) The present situation of graduate programs in Japan can be observed from the statistics (Tables V, VI and VII).[2],[5] In the areas of science and engineering, graduate study is generally well appreciated in Japanese society. Now, the emphasis of these programs is shifting from the traditional discipline-oriented prototype to a more discipline-intergrated or coordinated perspective.

Last year, the University Council of the Japanese Ministry of Education, Science and Culture (the Mombusho) released an interim report[6] which pointed to a softening of the Japanese Graduate School system with regard to its goals, admissions and residency requirements, academic structure, faculty requirements, facilities, curricula, etc. A new doctoral course graduate school of integrated research, independent of the undergraduate course, began in April 1989 on the basis of a cooperative arrangement between several National Research Institutes.[7] The major areas of specialization in this program include Statistical Science, Accelorator Science, Structural Molecular Science, Functional Molecular Science, Molecular Biomechanism, etc.

As for the training of science professionals and researchers, it is critically important to master the methodologies of each traditional discipline. It is also indispensable to be able to encourage a comprehensive, interdisciplinary approach to issues in science and engineering in order to adequately meet the academic and social needs of the societies which the graduates of these programs must serve. Such an emphasis would be an academically natural development as well as an administratively appropriate way to encourage many promising, able students to pursue their graduate work even when future career prospects in their chosen fields are uncertain.

Table I.

Number of Students Who Are Enrolled in the Post-Graduate Level (Level 7) [1]

Country	Year	All Areas		Science*		Engineering	
		M + F	F	M + F	F	M + F	F
Australia	1984	25,788	8,201	4,616	1,037	3,166	300
Canada	1985	90,152	38,153	9,670	2,472	8,348	866
China	1985	75,493	--	16,998	--	27,315	--
Hong Kong	1984	5,065	1,687	203	53	688	45
India	1979	335,765	89,797	56,989	16,117	13,474	612
Indonesia	1984	747,402	228,836	24,232	9,042	93,744	18,260
Japan	1984	65,692	8,587	6,846	537	21,323	373
Korea	1986	69,962	13,341	4,298	802	11,768	344
Malaysia	1985	1,303	428	229	92	56	13
New Zealand	1984	7,257	2,831	1,443	388	268	19
Philippines	1985	40,012	25,382	814	494	720	249
Singapore	1983	1,869	860	74	30	403	25

* Mathematics is included.

Table II.

Number of Students Who Have Completed Their Post-Graduate Studies (Level 7) [1]

Country	Year	All Areas		Science*		Engineering	
		M + F	F	M + F	F	M + F	F
Australia	1984	11,604	3,867	1,332	163	579	7
Canada	1984	18,681	7,591	1,994	481	1,940	188
China	1985	13,929	--	3,496	--	4,971	--
Hong Kong	1984	1,277	478	47	9	128	18
India	1978	128,723	--	16,808	--	1,020	--
Indonesia	1984	26,225	8,287	872	279	2,169	714
Japan	1983	20,518	2,385	2,189	163	8,740	115
Korea	1986	18,701	3,403	1,681	566	3,536	103
Malaysia	1985	59	10	25	7	7	0
New Zealand	1983	1,921	741	337	87	46	2
Singapore	1983	731	354	8	6	50	9
Thailand	1984	19	0	2	0	0	0
U.S.A.	1985	394,257	178,712	28,620	8,612	24,147	2,449

* Mathematics is included.

Table III.

Number of Foreign Graduate Students in Japanese Universities for 1988[3]

/Control/ Specification	National	Municipal	Private	Total	
Regular					
All Areas	5,384	281	1,621	7,286	
Science	380	31	31	422	(China: 208
					(Korea: 111
Engineering	2,102	59	528	2,419	(China: 1,297
					(Korea: 557
Special					
All Areas	1,426	120	492	2,038	
Science	64	4	11	79	
Engingeering	406	14	28	448	
Total					
All Areas	6,810	401	2,113	9,324	
Science	444	35	42	521	
Engineering	2,508	73	286	2,867	

Table IV.

Number of Foreign Students in Institutions of Higher Education[1]

/Institutions in/ Students from	Japan (1984)		U.S.A. (1985)	
All Countries	10,697		343,780	
Asia	8,699	(China: 5,185	179,854	(China: 32,400
		(Korea: 1,781		(India: 13,791
		(Malaysia: 343		(Iran: 12,198
		(Thailand: 408		(Japan: 11,467
				(Korea: 16,012
				(Malaysia: 19,758
Africa	166		29,345	
N. America	931		34,223	
S. America	353		18,581	
Europe	433		29,365	
Oceania	103		3,461	

Table V.

Number of Graduate Students Who Are Enrolled in 1988 (Japan)[3]

/Control/	National		Municipal		Private		Total	
Specification	M + F	F	M + F	F	M + F	F	M + F	F
Master's Course								
All Areas	35,839	4,603	2,091	407	18,666	3,681	56,596	8,691
Science	3,865	432	215	28	644	66	4,724	526
Engineering	16,115	394	745	15	3,360	69	20,220	478
Science -Engineering	2,644	160	0	0	3,924	161	6,568	321
Doctoral Course								
All Areas	16,307	2,046	1,386	209	8,187	1,207	25,880	3,462
Science	2,667	210	157	19	133	14	2,957	243
Engineering	2,355	120	80	3	143	5	2,578	128
Science -Engineering	663	55	0	0	562	18	1,225	78

Table VI.

Number of Students Who Have Completed Their Graduate Studies in 1988 (Japan)[3]

/Control/	National		Municipal		Private		Total	
Specification	M + F	F	M + F	F	M + F	F	M + F	F
Master's Course								
All Areas	15,239	1,728	893	170	7,647	1,358	23,779	3,256
Science	1,780	165	97	13	582	43	2,459	221
Engineering	8,131	196	333	6	2,665	47	11,129	249
Doctoral Course								
All Areas	3,294	301	247	28	1,789	274	5,330	603
Science	521	32	25	1	52	4	598	37
Engineering	611	9	7	1	103	2	721	12

Table VII.

Number of Japanese Universities and Colleges (1988)[5]

/Control/ Specification	National	Municipal	Private	Total
Universities and 4-year Colleges	97	38	357	492
Universities with Graduate Programs	93	23	178	294
Universities with Doctoral Programs	56	17	129	202
With Science Graduate Programs	33	3	23	59
With Science Doctoral Programs	14	2	20	36
With Engineering Graduate Programs	51	4	41	96

Footnotes

1. USESCO Statistical Yearbook 1987.
2. 1988 School Survey Report (Higher Education), Japanese Ministry of Education, Science and Culture.
3. Post-Graduate Education in the 1989's: OECD, Paris, 1987.
4. Higher Education in Asia: University Research Note No. 69 (March, 1987), University Education Research Center, Hiroshima University.
5. Nationwide University List, 1988 Edition: Agency of Japanese Mombusho.
6. University Council News, No. 2 (August 1988), Japanese Mombusho.
7. Integrated Research Graduate School Pamphlet, October 1988.

THE IMPACT OF CIVIL GOVERNMENT POLICIES ON INTERNATIONAL HIGHER EDUCATION IN THE PACIFIC REGION

Don Williams

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As I began preparing this paper I couldn't help thinking back to the history of PRAHE and how civil government policies have had an impact on our own history. In our first years we aspired to become a Pacific region organization and therefore called ourselves such. Yet our only claim to that status resided in the person of one lone individual from Australia, Bob Garton, whose government recognized the importance of creating policies and programs permitting scholars to travel abroad. Bob came to those early meetings, kept us up to date on changes in Australian higher education, and thus gave some credence of legitimacy to the claims we had of being a Pacific region association.

More recently our conferences have had a much more decidedly Pacific character, due in large part to policies of the governments in the nations that have hosted us. The Japanese government, for instance, has stressed in recent years the importance of internationalizing its educational system, and when we went to the International Christian University in Tokyo two years ago internationalization was the theme of what, to that point, was probably the most outstandingly successful of any PRAHE conference in our history.

This past year we went to Seoul, and here the combined efforts of the Korean Ministry of Education, the Korean Council for University Education, the Daewoo Foundation, and Ajou University produced another highly successful conference to which scholars from many parts of the Pacific region came. All of us who participated in last year's conference are indebted to our Korean hosts for the memorable experiences we had there.

This year we are meeting in the United States, where government policies regarding international education are more diffuse and where government support for conferences such as ours is less readily available. As a result our conference this year is smaller and less ambitious than those that preceded it during the two previous years.

I have gone a bit into our history as a means of illustrating the impact civil government policies can have on international higher education in the Pacific region. The governments of Australia, Japan, and Korea recognize the importance of the international exchange of ideas, but they have also gone beyond that recognition to provide the support that makes for a much richer experience for the participants. To be certain, our Japanese and Korean hosts also had access to private monies, and I shall want to return to this factor. First, however, I should probably take care to define my terms, in order that you may understand the context within which I speak.

Context

By "impact" I mean the effects that can be attributed to government policy. A government that generously supports international higher education will find a high proportion of its scholars and students studying abroad at any particular point in time. Scholars and students will have received support and encouragement for the study of languages other than their language of birth. Conferences such as ours will occur within the borders of this nation or state, and scholars and students will attend international conferences elsewhere on a regular basis because the government has recognized their value and has done what it can to encourage them. I am thus identifying three categories of impact: scholar/student study abroad, second language study, and international conferences. Those of you in my audience this morning can probably identify other categories, and I hope you will make them known in the discussion that follows.

By "civil government" I mean primarily two levels, but a third might also be appropriate, depending on the setting. I begin with the entity that controls the development of policy at the national level. Here is where the greatest power lies. Here is where the greatest wealth lies. Here is where a national commitment to international higher education can find its focus.

National government will rarely focus adequately, however, on international higher education. Its leaders confront many issues and many problems; and their capacity to focus specifically on international higher education for any protracted period may be limited. Moreover, certain national governments may simply just not find value in international higher education or -- as in the tragic case of China today -- they may find themselves in conflict with higher education within their own borders.

A second level of civil government operates at the state, provincial, or prefectural level. The Constitution of the United States make no mention of education with the result that much of the educational policy making occurs not at the national but at the state level.

Here again, however, the tendency for government to assert a strong role in international higher education is not strong. Although the states have a primary responsibility for educational policy in my country, the tendency for them to think internationally about education often proves less strong than at the national level. Government leaders in states along the American West Coast have reason, for instance, to look beyond their shores to sister nations around the Pacific. Western state government leaders devote a surprising amount of time and travel to cultivating these relations. Their primary motivation, however, is more economic than it is educational. They are looking primarily for markets abroad for products produced within state borders. Their recognition of the role of education in promoting economic well-being grows constantly, but it remains secondary to their more directly economic motivations.

We probably best understand these priorities if we realize that state government leaders must present themselves regularly to the voters who elected them to office. If leaders have not promoted those activities that interest the voters the most, the leaders will lose their positions. In the context of issues important to voters at the state level, international higher education does not rank high. Their interests tend in a decidedly more parochial direction. To the degree they have any interest whatsoever in higher education it is unfortunately limited for the most part to the fate of their own sons, daughters, nieces, nephews, and assorted neighbors wanting to matriculate at, and eventually to graduate from, some given state university. These more parochial interests make it difficult for state government leaders to take a strong position in support of international higher education.

If problems exist at the national or state levels of government, do other levels exist to which we can turn? In some instances a third level of civil government may indeed participate in international education. Here I have in mind city governments. My own community of Seattle, for instance, has as sister city agreements with Tashkent in the Soviet Union, Kobe in Japan, Managua in Nicaragua, Nantes in France, and a host of other cities around the world. To

the extent that any given international conference held in Seattle relates to one of these sister city arrangements, I suspect that we could enlist some sort of interest on the part of city government. On the other hand we are getting down to a level of government that lacks the power and the funding to play a very primary role in the kinds of activities we are discussing here.

The next important concept in the title of my talk this morning is "policies." By "policies" I mean those enactments by civil government stating specifically and operationally what that government intends to do as relates to international higher education. What funding will it make available, for instance, for scholar/student study abroad? The United States government at the end of World War II negotiated agreements with nations abroad whereby surplus United States war supplies would be sold and the currency thus generated be used to support educational exchange. Senator J. William Fulbright -- prior to his election to the Senate a Rhodes Scholar and later a university professor of law -- authored the bill in Congress which set this activity in motion, and the program has carried his name ever since. The Fulbright program not only brings international scholars to the United States, it also sends Americans abroad. Over the years many thousands of individuals have participated in the program, to the benefit not only of the United States but also to nations around the world. Here is a policy enacted by civil government that has paid dividends over and again.

Policies may also relate to the teaching of foreign languages. Occasional reports emerge within my own national government calling for greater attention to the teaching of these languages. Such an emphasis takes on new political potency today, when the United States feels threatened economically and sees our foreign language study as part of the plan to maintain our place in the international marketplace. Judging from the masses of Japanese students whom I see regularly on my campus at the University of Washington, the civil government of that nation, supported undoubtedly by help from the private sector, has a policy of immersing a sizable portion of its youth in the language and culture of other nations. Internationalization as a concept becomes vividly operational in this case.

As relates to international conferences, it would seem an extremely helpful policy for people planning conferences such as ours if some government agency were available to provide support. At the national level some such agency may

indeed exist, and if it does I should welcome your leading me to it. Here in California you may have a state agency of this sort, but those of us organizing this conference did so from faraway Seoul, Seattle, and Vancouver, which in itself proved a rather interesting exercise. I do want to talk with Susan Opper who is attending this conference, who heads the Education Abroad program at UC, Santa Barbara, and who undoubtedly knows more about these matters than do I. Our hosts here at UC San Diego in the Graduate School of International Relations and Pacific Studies have probably also tapped available state and national sources of funding for their conferences.

As I mentioned earlier, cities such as Seattle have agencies on whom conference planners can call. For all I know La Jolla has similar offerings, but we did not avail ourselves of them.

There remains a part of the title of my talk that I have not yet defined: "Internatioinal Higher Education in the Pacific Region." You already have a sense of what I mean by "international higher education" from my reference to scholar/student study abroad, second language study, and international conferences. This leaves me needing only to address the "Pacific Region" portion of my title.

A geograhical approach is most appropriate here, and I should like to return to the history and present status of PRAHE to illustrate my point. As I intimated at the start, PRAHE began with participants from three Pacific region nations: Australia, Canada, and the United States. Since then our membership has grown to include people from Japan, the Philippines, Korea, Thailand, Malaysia, and New Zealand (as well as several European nations). This year I wrote, with the help of Dale Heckman, to university colleagues in Siberia in hopes we could lure them to La Jolla. They responded that they couldn't come this year but that they hoped to come next year to our conference in New Zealand.

Other parts of the Pacific region we have yet to reach. We have papers this year for the first time on China, and at least one of our new members has ties to that troubled nation. We have never made connections in Taiwan, in southeast Asia (beyond Malaysia), or in Central or South America. Here we are at this moment just a few miles from the Mexican border; but with the exception of tomorrow's symposium presented by the Western Behavioral Sciences Institute

we shall not show adequate recognition to issues of higher education in the Pacific nations of Latin America.

Turning to the vast area of the Pacific Ocean itself, our Hawaiian colleagues have helped us in PRAHE to recognize that inside the so-called "Pacific Rim" lies a multitude of people and nations that are an important part of the Pacific region. Their insistence on this point accounts for the change in the name of our organization from the Pacific Rim to the Pacific Region Association for Higher Education (a change which did not alter, however, the association's original initials). It has made me sensitive to the vast majority of organizations and references in the media which cling, wrongly I believe, to the old concept of Pacific "Rim."

All of this serves to indicate that I have in mind the widest possible geographic conception of the Pacific region when I call for greater civil government impact on international higher education. Perhaps next year in New Zealand we may even find a way to bring the Antarctic into the picture!

Commentary

I have just called for "greater civil government impact on international higher education" within the Pacific region, and this statement requires qualifying. We can have good civil government impact, and we can have bad civil government impact. Can I distinguish between the two?

I have already mentioned what I consider to be some good civil government impacts within our region: the Fulbright program in the United States, the Japanese immersion approach to second language learning, and the efforts of cities such as Seattle to work with universities in developing closer relations with other cities around the world. What characterizes these programs that makes me want to call them "good?"

Perhaps the answer to that question lies in government's willingness to support international higher education without also insisting on controlling it. Thinking along this line received valuable support when Burton Clark in his important book, THE HIGHER EDUCATION SYSTEM, advocated what he called the "legitimacy of disorder" (1983, p. 273). Clark here was cautioning civil governments that the higher learning is a complex activity to which only a certain amount of order can be brought. Governments that try to impose their own order can only harm the higher learning.

Civil government -- whether national, state, or municipal -- thus makes its best impact as an "enabler," not a "controller," of international higher education in the Pacific region. The extent to which civil government policies, in the context I have here presented, enable scholars and students to study abroad, encourage second language learning, and provide support for international conferences, it has provided a valuable service. Having enabled these things to happen, it then serves well if it leaves to higher education the decisions on how to implement that which it has enabled.

Having made this statement I am very aware of civil governments' needs for accountability. The taxpayers whom I mentioned earlier want assurance that government spends their tax dollars wisely. Here the key term is "wisely." At an earlier time in our history higher education was considered to be a place of "wisdom" which the people and their government believed would spend their money wisely. Somehow we need to convince our observers that, in advocating "the legitimacy of disorder," we have not cast aside the wisdom associated with what we do. Such a task, I have to agree, is not easy.

In Conclusion

In conclusion I should like to return to a reference I made earlier in the context of PRAHE's experiences last year in Korea and the year before that in Japan. There we saw what can happen when civil government, working in consort with private enterprise, "enables" a fine conference to occur.

If your government -- federal, state, or municipal -- is like mine, it lacks the funding to do all of the things its people believe it should do. It can nevertheless go farther in performing its "enabling" role by allying with private enterprise in supporting international higher education. In my own state of Washington legislators have found it attractive, for example, to match public money with funds universities raise in the private sector. Such a practice, depending on the terms of the matching agreement, achieves public ends at a third or half the cost in public money. Meanwhile private enterprise has the opportunity to participate in activities beneficial to its long-term well being.

Civil government can play a critical role in focusing public attention on the need for healthy international higher education. It has a major capacity, moreover, to provide the needed funding. It need not, however, carry the financial burden alone.

In this paper I have tried to identify where civil government policies might best enhance the goals shared by people in this room, people who are committed to improving the quality of international higher education in the Pacific region. These policies, I have proposed, are best aimed at enabling -- without controlling -- the study abroad of scholars and students, the study of second languages, and the continuation of international conferences such as the one in which we are participating today. In this endeavor I have suggested that civil government and private enterprise explore ways of sharing this enabling role.

MULTICULTURAL/INTERNATIONAL POLICY AND HIGHER EDUCATION: A CANADIAN CASE STUDY

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As diverse socio-politico-economical factors throughout the world invariably intermesh and interact, the metropolitan area of Greater Vancouver, Canada's "Gateway to the Pacific", is in a state of flux. Both similarly and uniquely to other cities of the world, Vancouver is under pressure as it reacts and readjusts to these forces of change. The University of British Columbia (UBC), located in the city and the province's premier university, is correspondingly affected. And correspondingly challenged as policy decisions are made, implemented and proposed within the context of federal and provincial governmental policy. The paper is divided into three distinct but interrelated sections as convenient entities for discussion.

I. The Local Socio-Economic Milieu

Background Setting

Vancouver's future is inevitably tied to the Pacific. As a seaport it is the busiest on the Pacific coast of the American continents. Although Canada's largest trading partner is still the U.S., the Province of B.C. now for the first time exports more goods and services to Pacific Rim markets than to the U.S., 41 and 40%, respectively, compared to the national average of 75% to the U.S. A distinct trading pattern is arising. Not surprisingly, Japan is the biggest single Pacific Rim market, followed by the four so-called "Little Dragons" of South Korea, Hong Kong, Taiwan and Singapore, and three of B.C.'s five top private companies are Japanese (Mitsubishi, Simitomo and C. Itoh). The Hong Kong Bank of Canada has established its headquarters in Vancouver, having taken over the assets of the Bank of British Columbia.

These examples of operative economic forces are compounded by concomitant immigration pressures. Fifty percent of all immigrants, in recent times, because of their uncertain politico-economic future, came from Hong Kong to

Canada, almost all to Vancouver, Canada's third largest city, or to Toronto, our largest city. This migration of money and people from Hong Kong has resulted in various wags referring to Vancouver as "Van Kong" or "Hong Kouver" and, along with other factors, has contributed to the city's rising cost of real estate and the housing shortage.

Canada has been a haven for refugees, both political and economic, from many lands with a backlog of 130,000 claimants entered and unreviewed and the federal government has recently announced it would humanitarianly accept this year 16,000 Vietnamese refugees - a goodly number destined to settle in Vancouver within this ethnic subcommunity. The influx of migrants during the last several years has had a tremendous impact upon the education system, too. Presently, 52% of pupils in the Vancouver School District are ESL (have English as a second language) and 30% of the new immigrant pupils expected this coming academic year will be of Chinese extraction but this could go as high as 45 to 50%.

Racism

Because of the perception of increasing numbers of "visible minorities", population and traffic growth, higher costs of housing, increased competition for opportunities for jobs and advancement, and a growing loss of control of the economic power base as traditionally held and defined, etc., increasing numbers of Canadians, according to recent polls (Beltrame, 1989), are critical of the federal government's economic and immigration policies, with the population now about evenly divided as to whether immigration should be increased or decreased. Canadians pride themselves on being racially tolerant and free of the open excesses of segregation and discrimination. Yet racial prejudice appears to be on the increase, both overtly and covertly, and for something that so many people deplore, racism is a remarkably stubborn streak in Canadian society.

Recently white racists have found "learned" support for their own - although out of context - prejudicial attitudes in the controversial views of Professor Rushton (1988) of the University of Western Ontario who attributes genetic factors as central to differences between the variously defined social behaviour of Mongoloids, Causasoids, and Negroids. (It is interesting to observe how white supremists squirm with the cognitive dissonance they experience here with: (1) their fears of the "Asian invasion" of Vancouver, (2)

the specific statement of their racist champion Rushton who places Asians superior to Caucasians, and (3) the view, therefore, that such immigrants are a tremendous asset to the city's future.) Nevertheless, increased population densities and concomitant social pressures and the creation of "ethnocultural ghettos", as well as the feeling the government is perhaps doing too much to promote its policy of multiculturalism, tend to fan the flames of racism of those who feel most threatened and frustrated by these social changes.

Interestingly, this overall population growth with its present negative repercussions will have in the long run a positive impact. In the final analysis Canada requires large scale immigration to offset our low birthrate, expand our domestic market, and increase our human capital base to support our standard of living and social programs. In the meantime, it is likely that tensions will increase as more immigrants arrive, placing a strain on communities in greater Vancouver. It is easiest to dismiss this stress as concern about economic competition rather than racism but we should not ignore this existence of deeper causes. It is therefore extremely important that societal leaders and institutions do all they can to smooth the way and work for a truly non-discriminating society. The level of consciousness will have to be raised above the recognition of the racial prejudice to a commitment to an activist stance for equality with a pluralistic social order.

Equality and Multiculturalism/Internationalism

Of course, the singular concepts of equality and cultural pluralism provide an inadequate basis for public multicultural education in the widest sense as too often overlooked are the social realities of racism, sexism, class inequality, etc., and the realities of governmental considerations (Gollnick, 1988). Cognizant of racial problems that have plagued other cities and countries, the City of Vancouver has commendably attempted to deal with racial tensions on many fronts. The citizens have formed the Vancouver Multicultural Society to promote human rights, education, public service and humanitarianism; the mayor's office has formed the Ethno-Cultural and Race Relations Advisory Committee and public discussions on immigrants, foreign investment and available community services have taken place in order to dispell some of the anxiety stemming from recent events; the city has proposed the establishment of a Multicultural Training Institute to ease pressures by sensitizing senior civic

staff, police, leaders of labour and business, the media and community organizations and to make sure lines of communication are effective.

The school system has made an impressive effort to develop and deliver a multicultural curriculum for its diverse student population, the theory being that the best way to combat the potential growth of racism is through the education of the young. Through the resources and processes of the local Vancouver school system and a social studies curriculum based on the knowledge of the past, the awareness of the fast-changing present, and the planning of alternative futures - enriched by a nonlinear approach to ideas and infused with a cross-cultural and global consciousness - advocates are optimistic that education can make a difference. It is hoped that such a schooling will develop a form of individual citizenship that is well-educated, well-adjusted and responsible and appropriate for the multicultural society and international outlook that will be needed in the ever-increasing, interdependent world that is emerging with such rapidity.

II. Internationalism, Higher Education and Governmental Policy

With this specific overview of the situational climate found in Vancouver, as described above, and in which UBC is located as both an aloof and integral part of the city and its conditions and life, a digression to the national capital, Ottawa, and tangentially to Victoria, the provincial capital, is in order.

The Commonwealth

During the last three decades the number of Commonwealth university students studying abroad in Canada has been increasing to the point where Britain and Canada equally account for the destination of approximately one-third each of all Commonwealth students studying in Commonwealth countries, i.e., approximately 20,000 in each country. However, a further 120,000 students are studying in non-Commonwealth countries, partially due to discouraging complications in Commonwealth countries, including Canada. The Commonwealth Secretariat (1984) recommended the formulation of clear national policies to rationalize such exchanges and suggested twenty-eight recommendations that would establish an overall, well-defined plan and stabilize conditions for optimal student development. These were never implemented by Ottawa.

Foreign Student Decline

The total number of all foreign university students studying in Canada peaked around 1982-83 at 35,000 and has then been in decline (von Zur-Muehlen, 1987). The Canadian Bureau for International Education (CBIE, 1986a) warned that this 20% decline over three years in the number of international students is of a serious proportion and that the trend might not be a temporary aberration but a strong downward drop which was likely to continue in the absence of any policies designed to reverse it. There would be serious repercussions including the risk of Canada losing its already tenuous claim to world-class status in post-secondary education. And the effects have been particularly deleterious at the graduate level where attracting first-class students from abroad is necessary to maintain the quality and viability of many programs.

The country's ability to attract international students is being crippled by a lack of federal-provincial agreement on policy, limited scholarship assistance, high differential tuition fees, program restrictions, enrolment quotas, restrictions on employment, and the costs of accommodation, health care and other services. This loss of momentum is at a time when other nations are gaining enrolment. France, West Germany, the U.S. and the U.K, all of which have greater percentages of international students in terms of their total student enrolments than Canada, registered increases. The government of Japan, traditionally insular in this matter, has embarked on a massive program to push international student enrolment to 100,000 by the end of the century, a 1150% increase, and is offering hundreds of fellowships in teaching English as a second language to attract students from the English speaking world.

The CBIE report stated there is widespread agreement from all sectors of government, business and academia that Canada benefits greatly from hosting foreign students and that Canadian policies at the federal, provincial and institutional levels must be organized, clarified and modified without delay to reverse this decline in enrolment. It was recommended that: (1) differential fees for visa students should be ended; (2) 10,000 full scholarships (tuition and maintenance costs) per annum should be made available, with a substantial proportion to women; (3) employment restrictions should be dropped; and (4) funding for on-campus support systems should be increased for counselling

services, language upgrading and the professional development of international student advisors. Weston (1987), in a report for the Association of Universities and Colleges of Canada (AUCC), refers to similar conclusions in terms of graduate education for visa students specifically from developing countries. Increasingly, federal development agencies will be looking to Canadian universities to help them undertake new initiatives in such training but how successfully can the universities respond to this challenge while at the same time operating within known fiscal constraints?

Lack of Coordinated Policy

The CBIE (1986b), along with the AUCC, the Canadian Association of University Teachers (CAUT) and the Canadian Federation of Students (CFS), presented joint briefs to the Special Joint Committee of the Senate and the House of Commons on Canada's International Relations (1986) and were recorded in the minutes of the proceedings. Stressing the general agreement on the vital importance of receiving foreign students and the valuable spinoffs to all concerned, including significant and enduring links that have important ramifications for our relations with specific foreign countries, the enhancement of the quality of education experienced by Canadian students because of this international contact, and benefits that accrue to the capacity of Canadian research and development, two chief problems were addressed. Firstly, there was a mass of rules and regulations which have grown over the years without coordination or planning and which were administered haphazardly. Secondly, there was an absence of coordination and consultation between federal and provincial governments which resulted in reducing the numbers of international students, their effectiveness and the quality of their experience. The Joint Committee minutes record (p. 35), just prior to adjournment, the statement by the acting chairman that many of the committee members were not present that day the witnesses appeared but that their briefs had been received and read by the members of the committee.

The Council of Ministers of Education, Canada (1986) released a statement of issues for policy consideration on foreign students in Canada. Although it was pointed out that the matter of foreign students has so many facets that identification of the most salient issues is at best arbitrary, six areas of concern were discussed: (1) the need for formulation of a policy on foreign

students; (2) funding; (3) imbalances in the distribution of visa students within Canada; (4) arrangements and services for them; (5) integration of policy on foreign students with federal policy and practice on development assistance to the Third World; and (6) need for information and research on foreign students in Canada. During the academic year of 1985-86, about 32,000 visa students were studying at the postsecondary level, comprising 5.2% of all full-time undergraduates and 15.9% of all full-time postgraduate students at Canadian universities.

The lack of a policy focus, except in the case of block placement - where an agreement for consultation exists between the Council and the Department of External Affairs - is perceived as confusing and harmful to foreign students, wasteful of resources, and ultimately detrimental to Canada. It was concluded by the Council (1986) that although "...a single policy may not emerge from interprovincial or federal-provincial discussions of foreign students, what could emerge is a will for the policies of the various governments, provincial and federal, to be supportive of one another" (p. 16). Further documents were needed setting common principles governing provincial interest and priorities related to foreign students, principles for interaction with the federal authorities on this subject, and points of departure for future policy development by each province. Such documents were to be established on the firm basis that it is clearly understood that education is a provincial jurisdiction.

Federal, Provincial and Institutional Responsibilities

A particularly succinct overview of the problem and question of policies at all levels for Canada in terms of the visa student is presented by Fox, Humphries and Lewis (1987). The aim of the paper was to review the responsibilities of the three levels of involvement and elaborate on all important specific issues in order to guide the three jurisdictions to establish policy positions, separately yet interrelatedly, at the federal, provincial and institutional level. Thus: (1) The federal government is the gatekeeper, controlling the movement of international students to Canada through its immigration policies; it can award federal scholarships; its missions abroad represent Canadian institutions and can provide services and information to visa students and to the institutions themselves; the government also determines who

can and cannot work while in Canada and Revenue Canada determines tax policies with regard to international students. (2) The provincial governments fund the educational institutions directly through operating grants via funding formulae or global funding arrangements and influence therefore the choice of programs being offered and the fee structure, including the levying of differential tuition fees; the provinces also determine what portion of the Established Program Funding earmarked for higher education which they receive from the federal government actually goes to education; they therefore help determine the content and cost of programs and which are most relevant to the provinces' needs and thus availability to international students; they set the policies which determine access to services required by international students as residents such as health care and education of dependent children. (3) The institutions of higher education themselves - and sensitively cognizant of their institutional autonomy and academic freedom (AUCC, 1988a) - set standards for admission including language requirements; they recruit foreign students using varying degrees of activity and in various ways; they evaluate academic credentials earned abroad; they shape and determine the curricular relevance of the programs offered to foreign students and their countries; and they offer varying degrees of support services such as academic, personal and financial counselling.

These authors (Fox et al., 1987) also emphasized, "The decisions which determine policy at present are largely haphazard and uncoordinated. They are not guided by a central purpose or underlying philosophy. This discussion paper seeks to set out questions which must be answered if we are to establish consistent policies and programs at all levels of jurisdiction. It is motivated by CBIE's concern to promote policy design to replace the current policy drift, thereby improving our position as an international student host country and as a country which sends a significant proportion of our own students abroad" (p. 6). This policy making challenge is a complex undertaking but it must be done, and done well, in the coordinated fashion that is required. The task is compounded, however, not only by the fact that the formulation of policies relevant to international students occurs at the three levels of federal, provincial and institutional governance but also by the fact that the main forces driving such policies are cultural, financial and political. This process is further complicated by the paucity of information regarding foreign

students' perceptions, needs and experiences during and after their education which have policy implications. The limited research that is available should be taken into account to better inform policy makers and productive avenues for extensive future inquiry need to be developed (Holdaway et al., 1988; Zelmer & Johnson, 1988).

III. The Response of the University of British Columbia

Within this specifically general context of an absence of a clearly organized and defined policy coordinating the various levels of governmental authority and with an understanding of the relatively basic tradition of institutional autonomy enjoyed by Canadian universities, we return to consider the response of UBC, with its specific location set within the special milieu of Vancouver, to multiculturalism and internationalism as a case in point in higher education.

Historic Challenge

Today's university is crossed by numerous currents, many of them differing in both kind, quantity and degree from the pressures in the past, which challenge the institution dynamically to meet these demands. Worthy institutions must have a high degree of flexibility and adaptability in conjunction with delivering their traditional thrust. UBC, like so many other universities, has reacted to, and evolved historically with, these changing conditions and changed Zeitgeist. Federal, provincial, and municipal conditions directly and indirectly act upon the university's institutional mission to catalyze systematic changes in the priorities and practices of its function along a number of dimensions. One is always mindful, as must be those in decision-making leadership positions, of the cultural, practical and intellectual origins of pressures and always sensitive to the tensions between these often conflicting demands on, and the roles of, the university. Hopefully, changed and changing attitudes, if not outright strategies, are operative to minimize the symbolic separation between various factions and to ensure the continued evolution of the university's increasing effectiveness and stature.

Recent Foreign Student Enrolment

Other than the previous handful of English and American students, UBC

actually did not enroll any concernable numbers of international students until after the Second World War. Since those early post-war years, four decades ago, the international student population has continually and significantly increased. Presently, in the 1988-89 academic year, the enrolment is over 1,100 visa students, approximately 220 undergraduate and 890 graduate students, respectively (Thomson, 1988). A foreign student is neither a landed immigrant nor a casual visitor. He/she is a citizen of another country who comes to Canada for a temporary period to study on a student visa. Only those on such "student authorization" are labelled "foreign student." The present foreign student enrolment is encompassed within a total full-time student enrolment of 22,000 students, approximately 18,500 undergraduates and 3,500 graduate students. Over the last decade the number of foreign undergraduate students has remained roughly stable whereas the number of graduate foreign students at UBC, except for 1985-87, has shown a trend of yearly increase as illustrated in the following rounded data (ILO, 1987a; Student Record System Statistics Tape, 1987; Thomson, 1988):

Year	Undergrad N	Grad N	Total N
1979-80	190	500	690 (2.1)***
80-81	230	500	730 (3.7)
81-82	260	530	790 (3.4)
82-83	230	590	820 (3.4)
83-84	260 (1.4)*	670 (18.0)**	930
84-85	280 (1.7)	740 (19.3)	1020
85-86	220 (1.3)	730 (19.5)	950
86-87	190 (1.0)	730 (19.0)	920
87-88	180 (1.3)	840 (20.9)	1020
88-89	220 (1.2)	890 (25.0)	1110

* Percentage of total undergraduate enrolment
** Percentage of total graduate enrolment
*** Percentage of total university enrolment

Note that the number of foreign undergraduate to foreign graduate students is roughly 25% and 75%, respectively, three times the number in favour of graduate student enrolment. This relationship of larger numbers of foreign graduate students relative to foreign undergraduates has been a stable statistic over many years. These data become even more significant when related to the general total enrolment. Note that the bracketed figures show that the numbers

of foreign undergraduate students stably tend, in recent years, to represent only approximately 1.3% of the total undergraduate student population whereas foreign graduate students consistently tend to represent the much larger proportion of approximately 20% of the total graduate student population. Although not tabulated here, the ratio of female to male foreign students, in both undergraduate and graduate visa students, is also roughly 25% to 75%, respectively, in favour of greater numbers of males and this, too, has been a relatively stable trend.

The 1,100 foreign students enrolled in the present 1988-89 academic year represent 74 different countries of origin (Thomson, 1988). Rounding the totals, the 11 countries of origin that sent the largest numbers of visa students accounted for 70% of all foreign students enrolled:

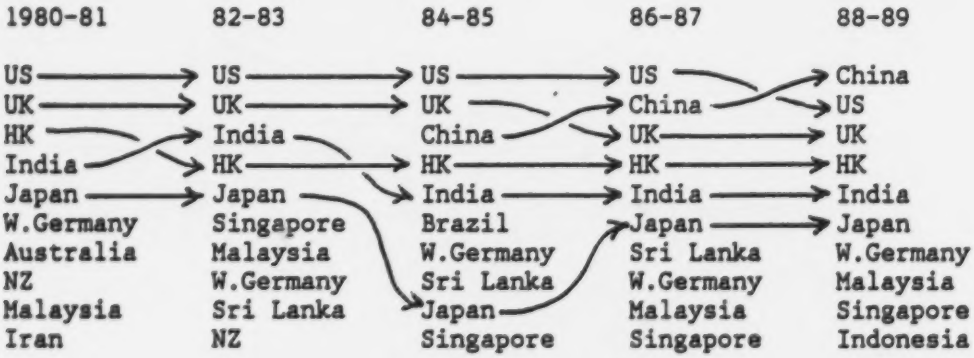
Rank	Country	Undergrad N	Grad N	Total N	Visa St. %age
1	China	5	190	195	18%
2	USA	60	120	180	16
3	UK	20	80	100	9
4	Honk Kong	10	50	60	5
5	India	5	40	45	4
6	Japan	15	25	40	4
7	West Germany	15	20	35	3
8	Malaysia	20	10	30	3
9	Singapore	10	20	30	3
10	Indonesia	10	20	30	3
11	Sri Lanka	-	25	25	2
		170	600	770	70%

(NOTE: The vertical totals for these partial data show that 22% of the foreign students are undergraduates and 77% are graduate students, roughly the 25% and 75% proportion previously indicated that is typically found.)

The remaining 63 countries, accounting for the remaining 30% of all foreign students enrolled, each accounted for less than 2% of the total numbers involved. (In terms of Asia/Pacific countries, these include countries ranging from South Korea, New Zealand, Australia and Taiwan each with rounded subtotals of 20 students; Thailand and Mexico with 15 each; the Philippines and Pakistan with 5 each; and North Korea and Bangladesh with 1 student each.)

In respect to country of origin and any change from the immediately previous academic year of 1987-88, the most significant changes noted were that students from China were up by 60 and from Indonesia down by 20 students (Thomson, 1988). Comparing these tabled 1988-89 present data with statistics two years previous, i.e., for the academic year of 1986-87, revealed further changes had taken place. The numbers of students from China were up by 85 students; Indonesia by 15; and Japan, Malaysia, Singapore and Taiwan up by 10 students; whereas the Philippines were down by 40 students and India down by 10 students. The enrolment numbers for the rest of the countries remained approximately the same (ILO, 1987a, 1987b).

By looking at the relative rank position of the top ten "donor countries" of foreign students for every alternate academic year over the last decade gives a better picture of important stability/change trends of this statistically interesting but complex dynamic (ILO, 1987a, 1987c; Thomson, 1988):



With some interesting exceptional trends, the top five or so tend to stay, over time, in the top levels indicating that the US, UK, Hong Kong, India, Japan and recently China are UBC's main and consistent sources of foreign students. Countries like Australia, Iran, Brazil and Indonesia appeared in the top ten only once in this analysis. The relative rank orders of the other 60 countries not included in the above listings are interesting to track, too, and have a significance of their own in terms of what "pronounced" shifts - even though the Ns are relatively small - mean politically, economically, etc., and the country-specific policy repercussions this might have on UBC and on the subtle aspects on the campus milieu.

In a statistical analysis that looked at the number of international graduate students enrolled at UBC from the 25 least developed countries of the world, only 16 students were at UBC and they came from only 5 of those countries: Bangladesh, Ethiopia, Niger, Tanzania and Uganda (ILO, 1987b). It has been a stated aim of the university that it has a special obligation to the Third World to help such countries. Apparently more effort may be required to seek out and support students from these nations.

An all-inclusive overview of place of origin of international students is presented with the collapsing of all individual countries into broad, general, geographical regions of the world. This comprehensive picture, although greatly reducing the individual details of nationality, nevertheless indicates at a glance the complete and larger scope of where the visa students come from and in what numbers (ILO, 1987d; Student Record, 1987). Looking at these general origins for the last three academic years gives a further sense of enrolment trends over recent time. The N's have been rounded for the sake of simplification and this data cover only visa graduate students, visa undergraduates are not included:

	1986-87	1987-88	1988-89
Asia	350	395	455
North America	155	155	135
Europe	140	150	160
Africa	70	80	75
Australia/Oceania	40	35	35
South America	20	15	20
Caribbean	-	1	5
	775	830	885

It is obvious from this table that the major region of origin is from Asia and has been increasingly so over these last three years.

Another statistic of interest is the relationship of place of origin and destined faculty registration (ILO, 1988). Using the same broad geographical regions of origin, and similarly limiting the data to foreign graduate students only, the following rounded Ns show a distinct pattern of distribution for the academic year of 1987-88 which apparently has been typical of recent years:

	Science	Applied Sci.	Arts	Commerce	Education	Medicine	Agriculture	Grad. Studies	Pharmacy	Dentistry	TOTAL
Asia	105	85	30	55	15	10	10	5	10	2	330
North America	60	10	35	5	15	5	5	5	-	-	145
Europe	50	15	35	10	2	5	5	5	-	1	130
Africa	20	20	5	1	5	5	10	-	2	-	65
Australia/Oceania	15	5	10	1	5	2	-	-	-	-	35
South America	1	10	2	-	-	-	-	2	-	-	15
Caribbean	-	-	-	-	1	-	-	-	-	-	1
	245	145	120	75	40	30	30	15	10	3	725

Foreign graduate students at UBC obviously enroll in the Faculty of Science, especially, and Faculty of Applied Science (e.g., engineering) followed by Arts and Commerce and then Education. It is interesting to note that 30 are studying in the Faculty of Medicine where enrolment is by necessity comparably limited. These trends clearly show the establishment of a pattern that requires further monitoring over time in the future.

International House

Paralleling the beginning of concernable numbers in foreign student enrolment at UBC since the end of World War Two has been their initial, formal organization as an association four decades ago and the corresponding responsibilities and activities related to their increase in numbers to the present enrolment of over 1,100 visa students representing 74 countries of origin. In 1949 the International Student Club was formed (McCombs, 1974) and modestly funded, as all other student clubs, by the student Alma Mater Society. A year later saw the formation of the B.C. Chapter of International House Association, Incorporated, at UBC and in early 1951 a committee was formed to build a permanent building. The first house was a temporary "hut" - a type of surplus army edifice omnipresent on the campus in those days, some of which are still in use today - which was officially opened in the fall of that same year, October 21, 1951, by Dr. Norman MacKenzie, the President of the University. (The association, of course, was open to all students interested in internationalism and the author, a Canadian born citizen and second year Arts

undergraduate student at the time, was a member and fondly remembers the occasion.) The present impressive building that International House now occupies was opened March 4, 1959, with funds from the Rotary Club International and Zonta, an international women's organization, now disbanded.

The purpose of International House, or IH as it is affectionately called, is to promote understanding and good will among Canadian students and students of all other countries attending UBC, and to assist the students and the University in handling the myriad situations that can arise within the personal, social, cultural, and academic lives of the community. The building provides a campus location to centralize a diverse range of services and activities (International House, 1985, 1987). These services include, aside from the centralized source of an astounding amount of specific information needed by those students with typical or idiosyncratic inquiries: reception of new arrivals and orientation; counselling of all kinds such as academic, psychological, familial, etc., and even concerning re-entry on facing the return home; assistance with immigration, finances, housing, liaison arrangements of all kinds for needed and useful contacts; and offering a friendly social/recreational centre for relaxation and social interaction. This latter opportunity is a central part of the important extracurricular education of university life available to all students and particularly broadening for those studying in a foreign country - and for those others interacting with such visitors from abroad.

Visa students have pressures of adjustment beyond those experienced by university students in general. Fernandez (1988) identifies five stages of acculturation: (1) conformity, (2) dissonance, (3) resistance and immersion, (4) introspection, and (5) synergetic articulation and awareness. An understanding of these stages is crucial to counsellors and their ability to help resolve adjustment problems. UBC has a unique Canadian Peer Program, a "buddy" system offered to newly arrived foreign students by IH and the Department of Counselling Psychology. The program links visa students (who wish to participate) with a campus Canadian student who keeps in regular contact and helps acculturation and adjustment with this personal, one to one, relationship. The local students are especially trained and experienced in cross-cultural communication. Lastly, in respect to the foreign students' experience and a successful stay, in every sense of the word, in their sojourn abroad, Whittaker

(1987) noted ten factors that describe the psychological propensity of an "ideal" foreign student syndrome.

International Liaison Office (ILO)

Established in February, 1987, the ILO is administratively part of the university's Office of the President, reporting to the Vice-President, Academic. It is the policy aim of the university to establish international education as a priority area of its general thrust and to increase significantly the university's international presence, contribution, interaction and reputation in teaching, research and services within this broadly defined area of academic endeavour. The specific mandate of the office is to provide central support in fulfilling this international mission which it is doing in an increasing and varied manner. The general goals of the ILO are three: (1) to help coordinate the numerous existing programs and services on campus and integrate them into a cohesive academic framework; (2) to identify, develop and share all resources - human, educational and technological - and provide a delivery system and communication network; (3) to develop a pro-active system through clear policies. A strategic plan, which is being developed through a series of policy consultations, reports of various Task Forces and decisions of the UBC Senate, is being prepared and soon will outline the operative vision for the office for the next ten years.

Although the ILO's scope is worldwide, because of our geographical position and the importance of present and future connections across the Pacific, the office has been particularly involved with the university's Asia-Pacific interests (Lee, 1988; Whittaker, 1988). As of January 1989, UBC has 65 signed exchange agreements with other educational institutions. Of these, 40 are with Asia-Pacific institutions. The Asian Centre is actually the convenient location of the office of the ILO which symbolically reflects this special focus. Similarly, the office works closely with nearby International House, as it does with all units on campus involved in international efforts, but with Asian students being such a large and important component of the foreign student population at UBC (for 1988-89, 45% of UBC's 880 visa graduate students came from the Asia-Pacific), this interaction with IH is a crucial one with significant long term ramifications. A recent summary of UBC's activities in internationalism in Asia-Pacific (Sproul, 1989) reviews faculty resources, the

range of courses and their enrolments, research, library resources, exchange agreements, international projects and the activities of the Asian Centre - where multi-functional facilities are used extensively for historic and contemporary exhibitions and lectures which are open to the public and enable the university's resources to be shared educationally with the public at large. This policy, too, has long term ramifications as a social service, educating and preparing the local population for the cultural, economic and political realities of the world of the 21st century.

Multicultural Liaison Office (MLO)

This office, recently established in July, 1988, is, like the ILO, administratively part of the Office of the President and reports to the Vice-President, Academic. The director of the ILO is a member of MLO Ad Hoc Consultative Committee - and important interconnection between the two offices - which will help articulate its, and coordinate their, priorities. This action initiating the MLO recognizes the increasing diversity of backgrounds and changing proportionalities of Vancouver's, and the province's and country's, population and consequently its impact on the university as well. (Interestingly, in a parallel situation of recognition at the national level, the former Department of Multiculturalism and Citizenship was upgraded to a Ministry in March, 1989. It remains under the office of the Secretary of State, a senior ministry, with its titular head the Under-Secretary of State, Multiculturalism. A legislative proposal is in the hopper to make it a separate ministry in its own right.)

Concerns have been expressed about how the schools can best address these ethnic changes but very little has been done at the university level to give official recognition to these changing population compositions. An important focus of the UBC office will be working with students, student leaders and involved faculty in identifying both the positive as well as the tension producing areas of student life on campus concerning ethnicity. Certain issues will no doubt require further pursuit and action in adapting more positively to the changing character of the campus and society.

There is probably a commonly held notion that the university is above racism and that its students, and even its professors and administrators, in their various pursuits of the challenges of higher education, are never racially

prejudiced. This, of course, is not entirely true, unfortunately, as racist graffiti and covert, if not often the less subtle overt, incidents testify. Both on and off campus the attuned ear can pick up remarks about the "visible minorities" of various ethnicity and their increasing numbers, influences and actions. Some of this has been directed at foreign students who are on student visas, some at individuals who are landed immigrants, some directed at people who <u>are</u> Canadian citizens (by birth or naturalization) and, equally sadly, treated as <u>if</u> they <u>were</u> "foreigners" by prejudiced persons, often members of the traditional "dominant" culture, feeling threatened for a variety of individual reasons by the social changes they see taking place.

By admitting to the presence of racism the next step is to do something positive to reduce it. Social scientists have been accused of researching racial "attitudes", etc., but not getting involved in changing behaviour. Some attitudinal and behavioural change will not take place on campus, perhaps, without more basic structural reform in the entire university system and it is here where the MLO may be instrumental in creating an even better climate of racial tolerance. The world of academia cannot remain insulated on the assumption that racism takes place only in the wider society.

Another important focus, along with contacting major funding agencies to help accomplish goals of mutual interest, and a prime objective, is to establish and extend contact with the wider community, especially the ethnic communities ("Bridging the Gap", 1989). Included here are those sectors of the community who have traditionally experienced the institution as inaccessible and insensitive to their needs and those whose interest in the university and whose expertise have not traditionally been drawn upon. The office will explore ways in which the university can extend its educational and research resources to those groups not well represented. Such contact and interconnections would also sensitize the university to the newer needs of a multicultural society and stimulate appropriate responses towards an improved societal integration of all population segments.

The director has stressed the importance of educating the public, to dispel popular myths, such as immigrants take jobs away, and openly discussing other important themes such as immigration, housing, access to education, human rights and equality, ethnic contributions to society, women's issues, racism, future goals, etc. There is a need to work towards changing people's perceptions of

who Canadians are and that they comprise a range of international backgrounds. Vancouver has changed from being a provincial city to a larger multicultural one that, if handled sensitively, altruistically, responsibly, advantageously, rationally, intelligently, joyously, can be a better city to live in and celebrate that greater global outlook that the future will demand of it.

Conclusions on UBC Policy

Within the multicultural context of greater Vancouver's fast changing social and economic climate and the lack of clarity and coordination in governmental policy on internationalism and higher education, UBC has nevertheless attempted to meet the challenge of its responsibility in these complex matters during these equally complex times. The fact that large bureaucracies tend to move slowly is a given. But the accomplishments so far, the directions taken, and the proposals made are commendable. Policy, as such, remains somewhat confusing. One of the problems is that there continues to be an understandable confusion between planning issues, policy issues and procedural issues - and their blurred indistinctions - for many interested people. It is clarifying always to remember that UBC policy issues that relate to budget, financial, expenditure considerations are controlled by the Board of Governors and that policy issues that are academic in nature are controlled by the Academic Senate. The distinction is important to keep in mind although many issues necessarily fall into both categories. Even in terms of the recently formed liaison offices within the President's Office, the ILO is concerned with "international" issues and the MLO with "domestic and internal issues" but many issues will overlap and a cooperative policy will be needed on the part of the directors.

In some ways, whatever actual "policy" is guiding the institution's present and future course, actual "action" is more fundamentally important and a better, and on occasion a more visible, indicator of the institutional worthiness. Thus, the specific aspects of actual foreign student enrolment, the actual establishment of such entities as IH, ILO & MLO and their corresponding activities, so many of which are, like policy, not immediately observable, are in the final analysis the university's "policy" defined operationally.

Many other more highly specific examples could be listed. For example, with multicultural and equality ramifications, the university's Native Indian Teacher Education Program, NITEP, now in its sixteenth year, makes a specialized contribution graduating Native Indian teachers as they are so significantly underrepresented in the B.C. school system in terms of the proportional enrolment of Native students (Archibald, 1986). This shortage has been one factor that contributed to the high dropout rate of such students and their correspondingly reduced upward mobility which the NITEP graduates, as positive models for Native children and more approachable mentors to offer empathetic rapport, hope to ameliorate. A similar program is in operation at UBC to increase the number of Native Indian students enrolled in law. These Native Indian programs, whose members belong to the First Nations, have important international connections, as aboriginals, with the native peoples of many other countries and with equally important consequences.

Another example with multicultural and human rights/equality ramifications is UBC's office of employment equity where Native Indian, specifically, visible minority, disabled and gender discriminatory/inequality situations or trends are being identified, and steps will be taken to rectify and bring actual employment of all subgroups into better balance with proportions found in the population at large (Employment Equity, 1989).

Internationalism is the thrust of the extensive official statement on foreign undergraduate students at UBC (Final Report, 1988) which recommends as eventual policy increasing enrolment from the present 1.3% foreign student undergradute enrolment to 4-6% in the near future as part of an overall strategy to raise UBC's international profile and contribution. This would approximate, or surpass, the 5.2% national average. Academic qualification and English proficiency standards would remain high and recruitment efforts would be increased. This would be accompanied by the abolition of the present differential tuition fee ratio of 2.5:1 as the present low percentage enrolment of foreign undergraduates is not acceptable for an institution aspiring to international stature.

A second, lengthy report was released two months later. A fifth draft, it covers in detail the official summarization of the proposal for the university's future course (The UBC Mission Statement, 1988). Related to the previous undergraduate enrolment point is another point that graduate work should be

strengthened by increasing the number of graduate students by 50%, i.e., the approximate 4,000 current graduate enrolment to 6,000 students. If the assumption is made that the current foreign percentage of approximately 20% is an acceptable proportion and is to be maintained, this would entail a corresponding 50% increase in the number of foreign graduate students, from roughly 800 to 1200 students.

The thrust of this report, at present a general statement for discussion rather than policy, is that the university is under growing pressure as the increasing application demands for the limited enrolment positions means many students will not be accepted. Thus higher entrance requirements are suggested, meaning that entrance will be restricted to only top students, an elitist approach. This also parallels the position made that the university should strive for excellence, for stature that is "second to none."

The recommendations of these two reports have consequences for, and repercussions with, other visions of the university's future and conflicting viewpoints are being expressed. The AUCC's statement on student matters (AUCC, 1988b) thus prefaces its principles on accessibility "that opportunities for university study should be available to all citizens and permanent residents of Canada who are capable of benefiting academically from such study" (p. 1) and in reference to the interest of Canada and its universities to encourage the access of international students a codicil is made that the universities "acknowledge their primary responsibility to provide access to qualified Canadian students" (p. 2). This would not be possible at UBC under the two proposals and other, or new, institutions would have to do it. The plan, therefore, would have to be coordinated with other institutional developments. If not, UBC, as a public institution that has served the taxpayer well, could be the target of a backlash if large numbers of parents became frustrated because of denied access for their offspring to receive a specifically UBC university education, still one of the most important vehicles for upward mobility.

There is a feeling among some that this frustration is already arising in respect to the shortage of placements in all institutions of higher education, including community colleges. And there has also been racial innuendos in reference to the apparently increased proportion of students of Asian extraction attending post-secondary institutions in greater numbers than previously observed. Ethnic origin is <u>not</u> recorded by the registrars for Canadian citizens

and landed immigrants so actual data are not available. But logic would suggest that statistics on Asian immigration and increased visa students from Asia, Asian children's respect for parents, Asian students' high motivation to both school achievement and attainment of a university education that is self-actualizingly impressive, etc., leads to the inevitable conclusion that they will go on to post-secondary institutions in proportionally higher numbers. This is obviously to their credit.

These factors pose multicultural/international propositions that interact in complex ways to almost all policy decisions in higher education as students are involved, directly or indirectly, sooner or later, and therefore also society in the larger community. UBC's actual past and present efforts, and its recent two general statement for the future - both lengthy but precisely written and presented not as policy but cautiously offered for discussion and reaction - are the ongoing process of evolving policy that realistically is never, and never can be, totally solidified nor finalized. "Policy" is practice, process and partial - and therefore dynamic. There is great advantage that this is so.

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EDUCATING LEADERSHIP FOR THE PACIFIC CENTURY

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I. Introduction

There in an increasing level of attention being given to what has come to be called the "Pacific Century" -- the coming era which will have as its focus the nations, societies, peoples and cultures of the Pacific Basin and the Pacific Rim. I would like to discuss some of the skills and attitudes which I believe will be necessary for leadership in this new Century of the Pacific. There will be roles to play in this new era other than those of leadership, just as now, and these will be important. But I wish to focus my remarks on education for leadership because I feel there is at present and will continue to be a crisis of leadership in our country, a crisis both because those who seek leadership roles are increasingly ill-prepared for them and because the role of leader is increasingly unattractive. The unattractiveness is due to what one commentator has called the "crisis of followership" in America -- that is, in our well-educated and independent-minded democracy we demand leadership but are loathe to give our leaders the authority over our lives necessary to achieve the social and cultural goals which we have chosen to pursue.

I have approached this topic in terms of "problem/possibility" thinking, the type of thinking which I believe is crucial to successful leadership now and in the future. It is the type of thinking which recognizes the positive and what more current phrase, the light side and the dark side of every force. In particular, I want to focus on the problems and possibilities of information literacy and cultural literacy.

II. The Challenges to Change in the Pacific Century

Some years ago the former U.S. ambassador to Japan, Mike Mansfield, noted that "It is the Pacific and East Asia where we will see things happening in the next century because the next century will be the 'Century of the Pacific.'" There is much happening at present where the levels of social, cultural,

economic and political activity in this area continue to increase at a rapid rate. Half the world's people live in the Pacific Basin and on the Pacific Rim. Since 1978 U.S. trade across the Pacific has exceeded its trade activity across the Atlantic. The CINCPAC military command in Hawaii is the largest U.S. military command in the world in terms of area of responsibility and, increasingly, in terms of geo-political importance. And the contest for supremacy in the information revolution has become primarily a Pacific-focused battle between the U.S. and Japan.

The fastest growing areas of Christianity in the world today are in Asia, and one theologian recently remarked that "Christianity was born in the communities of the Mediterranean and was nurtured through its spiritual childhood in the communities of the Atlantic, but it will achieve its maturity as a world religion in the communities of the Pacific."

Dr. Giamatti, the former president of Yale University, remarked in a speech to Yale alumni in Hawaii several years ago that he was fearful that Yale -- the first American University to have an academic program in China -- had become too closely identified with Europe and the Atlantic community, that its role as an international university had not been made sufficiently clear in the Pacific, and that greater effort to identify Yale with Asia and the Pacific was needed. He also pointed out that, after experiencing on an Asia trip the level of energy and risk-taking evident almost everywhere in this region, he found the eastern part of the U.S. by comparison to be almost anemic and the majority of European nations to be coasting on their oars.

If these prophecies of a future Pacific Century are valid, and I believe they are, then there will be a shift in the geo-political, social, cultural and economic focus of the world from the Atlantic to the Pacific. We shall have to learn to think in terms of new references of time and space. Thus, those of us who were born in Boston, New York, etc., will say that we are from the Far East. And those of us who drive a car that has been manufactured in Japan or Korea will say that it came from the Far West. And that will make Hawaii the Midwest and Los Angeles a Middle East metropolis!

These events are challenging us to change our ways of thinking, our social and cultural presuppositions, our geographical awareness, and our sense of perspective. Our ability to respond to such challenges will require new skills as well as a refocusing of some of our old ones; it will demand new thought

patterns and perhaps an entirely new consciousness. Are we as individuals ready for such changes? And are our educational institutions ready to help us in meeting these new challenges? What are some of the problems and possibilities which will confront our leaders in this Pacific Century?

III. Some New Skills: Information and Media Literacy

Let me focus first on perhaps the most obvious problem-possibility area today -- the information revolution. Those of us who are fortunate enough to live in an economically developed nation, and in particular we who live in the United States, find ourselves in increasingly information-rich and overcommunicated environments. I remember a poem about a man sitting on a hill overlooking his hometown on a Sunday morning and listening to the church bells ringing. He remembers the time when there was but one church in this small town and its bell rang out with a singular meaning and gave direction on Sunday mornings to the place where one could worship one's deity. Now he laments the confusion of so many churches ringing their bells all at once, calling one in every direction to worship a variety of different deities or the same deity in a variety of different manners. The confusion of options overwhelms the freedom of choice.

Many of us grew up in simpler times, in one bell towns, so to speak, where the choices and directions were more limited but certainly easier to recognize. Now most of us find ourselves living in environments that resemble a Hong Kong street, with so many neon signs simultaneously flashing their messages that there is high stimulation of the senses but almost no communication of information. This situation is a result of the conflux of two rapidly developing technologies: electronic computers and telcommunications systems.

It is first and foremost the product of the explosive increase in the speed of digital computing systems. We can now purchase personal computers which operate at microsecond speeds (i.e., performing millions of operations each second); in our places of business, government and education we use minicomputers which operate at nanosecond speeds (a billion calculations per second) and mainframe computers which measure their speed in picoseconds (one trillionth of a second). And if that were not enough, researchers at several labs have isolated laser light pulses that are measured in femtoseconds (one quadrillionth of a second). If you can isolate such a pulse, then you can use it to do work in a computer. And to give you some idea of how fast that is,

take note that there are the same number of femtoseconds in one second -- one quadrillion -- as there are seconds in thirty million years!

Add to this the continuously decreasing price of computer power -- such as DEC's Microvax which offers for approximately $30,000 a computer system almost as powerful, capable and fast as their VAX 11/780 of five years ago which used to cost as much as $250,000 -- and it is possible for almost anyone to begin thinking about how they might use a computer to improve or to speed up the work and leisure of their daily lives. But what does this application of computers to an ever increasing list of daily tasks do for us? Or perhaps the question should be: What does it do to us?

It is clear that computers and telecommunications speed up the information flow in our lives, increasing the amount of data that is available to be considered relative to each decision, as well as an increasing the number of decisions we must make in the same time frame by increasing the number of options or choices which are available to us in the various areas of our lives. This increase in computer speed also changes our sense of time and our sense of time-tolerance: the durations which we come to consider as normal after working with high speed computers on a regular basis are for the most part much shorter durations than those within which human beings are accustomed to responding. Our productivity as human beings may be increased significantly by nanosecond and picosecond processors, but the accompanying collapse of time may also result in a loss of patience with those around us who continue to think and act in the lived time of human interaction.

The information-rich and overcommunicated environment is also a result of the increased access which the developments in telecommunications technology have given us in recent years. Biblical Babylon turns out to be a real piker when compared to the 100 or 150 channels of cable television that are currently possible or when compared to the thousands of computer databases that are accessible through the phone systems today. And whereas the increased speeds of computers distort our sense of time, the instantaneous and simultaneous "presence" of almost everything everywhere in the world through our audio-visual and computer systems results in a distortion of our sense of relationships, in a loss of our sense of place, and in what the political scientist Harlan Cleveland has recently called the "passing of remoteness."

The resulting overcommunicated, information-overloaded, overly complexified and over-stimulated environments are fascinating and exciting, and

perhaps necessary to support the immediate gratification of our wishes and the fast-track lifestyles which many of us in the U.S. take for granted these days. But there is also a range of problematic responses that we increasingly encounter. With so much information transmitted to us through the various media, many of us react with an indifference to most types of information and, in some cases, suffer a debilitating numbness in the fact of important decisions. With so much information available to each of us, there begin to emerge very specialized and limited "colonies of consciousness" within which we feel comfortable communicating, but between which communication -- from parent to child, spouse to spouse, neighbour to neighbour, employee to employee -- is increasingly difficult if not impossible. Those who attempt to accommodate and process the overload of information in a timely fashion often suffer what is called "burnout". The regular living presence via electronic media of world events in our living rooms and offices can threaten us with feelings of insignificance, while the increased complexity of these option-rich information environments causes many to withdraw to the simplistic, to seek easy answers, and to embrace the security of cure-all systems which have a solution for everything. And, at the extreme, we see an increase in personal aberrations such as drug and alcohol abuse, spouse and child abuse, as well as, at the collective level, an increase in terrorism of all sorts as individual and collective psyches collapse under the pressure of such environments and lash out to destroy that which threatens them.

The poet Robert Frost asks, "What knowledge has been lost for all of our facts; what wisdom has been lost for all for all of our knowledge?" This question may be the key question of the information age. The problem is simple; in an information-rich environment too much knowledge can be a liability. The key skills become those of criticism, analysis and judgement, rather than acquisition and retention of facts.

The real challenges now lie in how to build intelligence into machines; and the leading edge discipline today is called "cognitive science" which is a fruitful combination of psychology, philosophy, anthropology, linguistics, computer science and neuroscience. Some believe, as I have noted elsewhere ("Adjunct Consciousness" in Educom Bulletin, Vol. 21, No. 3, Fall, 1986), that the technological marriage of increasingly sophisticated computer and telecommunications systems will produce a form of adjunct consciousness which

will expand our limited human capacities to deal with information-rich and decision-complex environments. Sherry Terkle, in her book, The Second Self: Computers and the Human Spirit, cautions, however, that for many who become involved with computers there is a "seducation of the self" and a transformation of personality and self-identity. Although she notes both good and bad aspects to such transformations, she worries that they are seductions rather than self-conscious acts of will by individuals.

The astrophysicist, Robert Jastrow, goes even further in his book, The Enchanted Loom: Mind in the Universe, and endorses the idea that artifically intelligent systems may someday replace human beings as the superior form of intelligence on the planet; he suggests that "homo sapiens" may go the evolutionary route of "austrolopithicus" and disappear from the evolutionary tree some 15 or 20 million years hence, while some form of silicon-based (or perhaps some form of non-human biologically-based) artificial intelligence maintains and develops the presence of intellect in the universe. Harlan Cleveland, political scientist and former director of the Aspen institute of Humanistic Studies, foresees the disappearance not of human beings themselves but of some very important factors that are at the foundation of most social and cultural systems which exist today. A truly global information society, he notes in his book, The Knowledge Executive: Leadership in an Information Society, will result in the continual erosion and eventual collapse of hierarchical systems, in the obsolescence of ownership, and in the almost total impossibility of keeping anything secret anymore.

But perhaps the most disturbing scenario comes from David Noble, MIT Professor of the History of Technology and now curator of industrial automation for the Smithsonian. Writing in the November 1984 issue of Datamation, Noble laments not the changes which the computer and telecommunications revolutions are bringing about in our society but the almost complete naivete with which most of us are embracing these events. Because of the importance of his insight, let me quote his concluding remarks in their entirety:

> "Everyone believes the U.S. is in the midst of an economic tranformation on the rder of the industrial revolution, "Business Week" reported recently. But no one alive today remembers firsthand the trials and turmoil of that first industrial revolution. This explains why people have thus far greeted the second industrial

revolution with such complacency, and even naive optimism. Thus, the prospect of another industrial revolution has generated considerable excitement -- among those who see a (sur)reality of total control right around the corner, and among those neoprogressive politicians whose rosy rhetoric belies their ignorance of the human trauma and tragedy of the first industrial revolution, and of the mass insurrection that followed in its wake. The analogy commonly made between the present transformation and that of the nineteenth century remains only half complete: the catastrophe has been left out. For a fuller analogy would shake the spirit, not stir it. And give thoughtful people pause: What will happen to the dispossessed? What will the consequences be once our world too has been "turned upside down" -- as British historian Christopher Hill aptly described the earlier period. To date, few have the right questions much less any answers. And in the meantime, the compulsion to automate (and to dominate) -- fueled by newly inflamed competitive fears -- continues apace (and resistance grows). As a result, we see, not the revitalization of the nation's industrial base but its further erosion; not the enlargement of resources but their depletion; not the replenishing of irreplaceable human skills but their final disappearance; not the greater wealth of the nation but its steady impoverishment; not an extension of democracy and equality but a concentration of power, a tightening of control, a strengthening of privilege; not the hopeful hymns of progress but the somber sounds of despair and disquiet."

This debate concerning the problems and the possibilities of information and media systems is an important one and we have an obligation to keep track of both the dark side and the light side of those issues. In my own case, I have MacIntosh computers both at home and on my desks at GTE Hawaiian Tel and Pacific Century Associates in Honolulu; and I use them both daily for a wide variety of tasks. Computerization of the administrative affairs of Hawaii Loa College and development of an information science major at the College were two of the first projects I undertook when I became its president in 1978. But in the work I do as an information systems planning consultant, I am also very much aware of the distress and dislocations which the automation of almost all

types of work can cause and, as a result, I spend much of my consulting time helping organizations create a productive and effective synthesis of information technology and human energy.

In her book, In the Age of the Smart Machine: The Future of Work and Power, Shoshanna Zuboff argues that the true tranformational power of information technologies will emerge only when they are used to "informate" work instead of "automating" it; for the former approach organizes work and technology to enable human ability and creativity, while the latter usually employs information technology to disable human ability and constrain creativity. I find Zuboff's analysis and insight to be right on target and an optimistic counterpoint to David Noble's pessimism. I believe there is a need for both information literacy and media literacy if we are to continue to function as effective citizens of the world and to continue to enjoy the value of being human. We must move into this information age -- with all of its potential and danger -- with our eyes open and with our consciousness attuned to the full social and cultural impact of its tranformational technologies. I come down on the side of optimism with respect to the information revolution, but my optimism is not, I hope, naive.

IV. Refocusing A Neglected Skill: Multicultural Awareness

Let me turn now to the second focal point of my remarks, the area of multicultural awareness. More than two decades ago, Marshall McCluhan wrote about "media" such as television, telephone and radio as extensions of the human perceptual organs which provided our senses with a global reach and which would eventually create a "global village." We are still at only the very beginning of the information revolution which will give each of us (who wants it) access to the information and experiences of that global village, but it is already clear that we are going to need considerable help in processing and understanding that wealth of information if we ever hope to achieve a "global consciousness."

The French anthropologist Teilhard de Chardin wrote that "The age of nations is past; it is time to build the earth." But just how does one go about "building the earth?" It is certainly a noble ideal which suggests world peace and human cooperation; but just where does one begin? How does one

develop the cultural literacy necessary to create and then live comfortably in a global village?

First of all, we should not expect to find nor seek to create, in my opinion, a uniform socio-cultural sameness for the new world, i.e., something modeled after the "melting pot" metaphor which guided so much of the immigration and resettlement efforts of this century in the U.S. Rather, the metaphor of the "cultural bouquet" and the rich pluralistic society seems much more appealing to me as a model for our efforts at building a global village. But there are some serious problems confronting such an effort.

First, there is the problem of preserving the identities of the various cultures in our "bouquet." The computer/telecommunications revolution which I discussed earlier has also resulted in an electronic imaging of the world's societies simultaneously and instantaneously around the world such that the ethno-centric focus of many cultures is being confused or totally lost. At the other extreme, we are confronted with the fossilized cultures of various immigrant enclaves where the social and cultural time has almost completely stopped, mummifying the values, manners and morals of some far away place at some long ago time, and creating a collective psychic grave in which those who are unable or unwilling to deal with the reality of the present can bury their minds and their spirits. And in the middle of these two extremes is the less noticeable process that many of us use to make various elements of our own and other cultures totally irrelevant to the conduct of our daily lives; we accomplish this -- usually without realizing it -- by creating stratified "showcases of culture" for the enjoyment of tourists and for the study of researchers. The German philosopher Hegel and the contemporary Marxist philosopher Lukacs have both noted in their work that in order to undermine the social and moral force of a culture one must move the values of the culture from their role as the basis of understanding the world to the position of being an object in the world. And the best way to achieve this is to create special times and places where "the natives" of the culture are encouraged to display or practice their culture for the consideration (i.e., enjoyment or study) of others. Once the values of the resident culture have been removed as the basis of understanding, the way is then open to replace them with the values of whatever social, political or religious ideology is currently managing the "cultural showcase."

The danger here is that we are losing vital, effective and meaningful cultures which might serve as "flowers" for our cultural bouquet of the world. As a result of these three forces we may instead end up with a bunch of dead, dried or plastic cultures for our global arrangement.

But let us also look at the other side of the coin, at the overwhelming number of cultures in the world and the seemingly impossible task of becoming multiculturally literate. Most of us have protected ourselves from cultural information overload by relegating the majority of the globe to culturally uniform places. Thus, in the U.S., we speak of China or Africa or South America as if they were homogeneous places where everyone speaks the same language, worships the same god and votes for the same political party. We are not unique in this; most people in other countries think of America in equally simplistic terms.

It is not just the fact that, for example, the peoples of a place as geographically small -- although currently internationally very visible -- as the Philippines speak over a hundred different languages or, more precisely, dialects that make our task difficult. Marshall McCluhan has also reminded us that with each new culture or people we encounter we are confronted with not only their "present" culture to understand but also with hundreds if not thousands of years of their history. Becoming multiculturally aware of the present also brings with it the wealth of the past. Thanks to which we now must worry not only about what the future will bring but also what the past will bring if we seek to educate ourselves!

Nor is discovering the past of another culture as benign a process as one might think. When the Mandarin Jesuits began introducing Christian Europe to the cultures of China, the five thousand years of recorded Chinese history caused no end of difficulty for a religion which at that time claimed that the world had been created by God sometime around 2000 B.C. And when the German philosopher Christian Wolff suggested that his study indicated that the Chinese had developed an entirely moral culture in spite of never having heard of Jesus Christ, he was fired from his university position at Halle and driven out of town by an angry mob!

The problems of achieving cultural literacy are more numerous than these few I have mentioned, but they must be confronted because the problems associated with the lack of multicultural awareness are much greater. As our

world has become politically and economically more interdependent and as modern telecommunications technology has created a global omnipresence, we cannot really understand much that occurs in our daily lives without such an awareness. The price of gas for our cars is linked to the wars in the Middle East, the price of our goods is tied to surpluses on other continents, and the number of jobs available in the U.S. is determined by the price of labour in a dozen different nations.

Such multicultural awareness is perhaps most difficult for Americans to achieve, for the fact that English is a world language is both an advantage and a significant disadvantage for us. It is certainly an advantage that English is spoken almost everywhere in the world, and anyone who travels internationally can attest to the convenience of finding your own language spoken in airports, hotels and restaurants in most countries. And yet Americans are disadvantaged by this fact also, because there is little if any incentive for Americans to learn the language of another culture. And the dangers of monolingualism are more than just those of missing the great literature of another culture or of being forced to stick to the "tourist routes" when visiting a foreign country. There is also the danger of becoming -- or, worse yet, remaining without knowing it -- culturally myopic, of being able to understand the world only in terms of the English or American mind set, of thinking of the "American Way" as the only right way of doing anything.

It is our language which is the primary source of the awareness of our own culture. Learning another culture allows us the opportunity to think in terms of another view of the world, to be aware of events through different social and cultural structures. Having only one language in which to think makes if difficult for us to gain any intellectual or cultural distance from our thoughts; we become trapped in a single mind set and victims of our own myths because we have no way to stand back from them and evaluate them from a different basis. I complained when I was forced to study Greek, Latin and Spanish in high school and French and German in college but in retrospect I am thankful. I have lost the facility of communicating effectively in all but the German language but I use almost daily the facility of stepping outside of "my English language mind" to evaluate the various problems and possibilities that present themselves to me.

By contrast to the American situation, we find English studied in most of the other nations on earth. It has been estimated recently that as many as 250 million people are studying English in some formal manner in China. This poses the interesting possibility that China eventually may become the world's largest English speaking nation! And one does not have to be in Japan or Korea for very long to discover the English language radio and TV stations, and the existence of several English language newspapers. In Europe, the second language of choice in the schools on both sides of the Iron Curtain is usually English.

English has become the language of international commerce and world affairs; both our friends and our enemies are studying our language and learning to understand the mind set through which we view the world. And so a great number of them will understand us, but only a few of us will understand them because we do not study their languages and cultures. They will understand our society and be able to market their goods, services and ideologies to us, as the Japanese and more recently Russia's Mr. Gorbechev have amply demonstrated, but only a few of us will understand their society with its goals and objectives or their culture with its values. And, as a result, we likely shall not do very well in the international marketplaces of goods, services or ideas.

But there is a greater disadvantage yet for those of us who are fortunate enough to have a world language as our mother tongue and thus find no reason to study other languages and cultures. Perhaps the real danger in the lack of cultural perspective, in the lack of a sense of history, in the lack of the ability to distance ourselves from one way of thinking and one way of seeing the world is that it makes change in our lives extremely difficult if not almost impossible. The lack of multicultural awareness makes changes of viewpoint difficult because without this literacy we often fail to see any need for change; the need is there, mind you, but we are simply incapable of recognizing it for lack of the perspective which would make it visible for us. And in a world of rapid social, cultural and technological changes such as ours, an inability to change, or at least to understand the changes that are occurring, can be devastating.

I am not talking about the relatively meaningless changes in the social and cultural surface phenomena of the world such as clothing fashions, food tastes or music preferences. I am referring rather to the shifts in social and cultural foundations which demand changes in view point of an almost

metaphysical or cosmological nature. Let me give you an example that was important for recognizing this fact in my own life. Almost 25 years ago, on a TV talk show, a nationally known commentator was interviewing a Grand Dragon of one of the Klu Klux Klan chapters. The discussion focused on why the Klan excluded from membership persons who were Jewish, Catholic, Polish, or Black. As the conversation progressed the representative of the Klan was willing to admit that there might be a variety of mitigating circumstances which would allow, at some point in the future, persons who were Jewish, Catholic or Polish to become members of the KKK. In spite of intensive questioning and pressure from the commentator, however, the Grand Dragon would not agree that there would be any circumstances under which a black person could be admitted to the KKK. In the end, he almost exploded in anger with the explanation: "Look, if niggers are as good as white people, then what good does it do to be white?"

Let us pass over the obvious problem here of defining one's self-identity in terms of that which one is not, i.e., the value of being white for him was that it meant he was not black. The important issue for me in this exchange was what appeared to the commentator to be a relatively simple request -- i.e., change one's social viewpoint to accept all people regardless of race or colour as being equal -- was perceived by the Klan representative as a request to change the nature of the universe. To accept Blacks as being equal to white people was tantamount to asking God to recreate the universe.

I use this as an example because I believe that all of us, including myself, hold to one or more viewpoints which may appear to others to be relatively simple to change or abandon entirely but are for us almost metaphysical in nature. The women's movement in this country has often encountered the question from some men, "But if women are as good as men, what good does it do to be a man?" And if Buddhists can achieve salvation just as easily as Christians, then what good does it do to be a Christian? And if socialism is as good as capitalism, then what difference does it make if one is Russian or American?

Pardon me if I have stepped on any metaphysical toes, but I would suggest that each of the changes in viewpoint suggested by the above questions are merely slight shifts in social opinion for some, but are fundamental cosmological upsets for others. Developing a multicultural awareness will at least help us recognize this difference in attitudes toward change, if not

actually facilitate our changes in perspective if and when the time comes. And it is my view that such times will come more and more often for us all in the future.

There is a Chinese curse which I am fond of quoting which goes, "May you live in interesting times." And indeed we do.

V. A New Consciousness for the Pacific Century

Lest what I have presented thus far seem to you to be more on the problem side of the future's ledger than on its possibility side, let me conclude on a hopeful note. I began with a quote from U.S. Ambassador Mansfield in Japan on the Pacific Century, so let me begin these concluding remarks with a quote from former Japanese Prime Minister Zenko Suzuki concerning what we should hope for in this new civilization centered on the Pacific Ocean:

- "The Pacific must be first an "Ocean of Peace" -- as it is named -- for peace is the foundation for the continuing existence and prosperity of any people.
- "The Pacific must be an "Ocean of Freedom" -- providing freedom of exchange of both people and goods which will lead to the development of the region.
- "The Pacific must be an "Ocean of Diversity" for we must be mindful of the need to cultivate a spirit which respects and accepts the originality and independent initiative of every Pacific nation.
- "The Pacific must be an "Ocean of Mutual Benefits" in which we actively use every means at our disposal to increase our mutual interdependence and understanding.
- "And finally the Pacific must be an "Open Ocean" in which the circle of Pacific nations is linked to all the other nations of the world."

Mansfield's remarks call our attention to this new era of the Pacific; Suzuki's remarks suggest what our hopes, or perhaps what our demands, for this new age should be.

What then should we hope for or demand in the way of education for our leadership that will allow them, as well as you and me under their guidance, to bring about the promise of this new age? I think we should demand an education for our leaders which will result in nothing short of a total transformation of their thinking about themselves and the world; I think we should demand a new

consciousness. And let me be so bold to suggest what I think the key elements of this new consciousness are that this educational process should seek to instill in our leaders.

First, I think this consciousness requires a notion of tolerance based upon humility -- not a tolerance that says "I know I'm right but you can go to hell your own way if you want," but rather a tolerance that recognizes and accepts the limitations of each and every human being's experience and knowledge, especially that of our own worldview.

Second, I think it requires that we understand what we call "wisdom" in terms of what the medieval philosophers in Europe called "learned ignorance." It is a view which holds that each time we gain more knowledge, what we really discover is how much more there is to know; each time we read a scholarly book, the bibliography at the end suggests how much more there is to read on this topic. Western thinkers have expressed this viewpoint in the words: "The more you learn, the less you know; the more you study something, the more you become aware of just how little you know of what there is to be known." In the Orient, various thinkers have expressed this same view in the words: "He who speaks does not know, he who knows does not speak; the truly wise person is reduced almost to silence by the awareness of his ignorance."

Third, this new consciousness will need to accept learning as a lifelong, continuous and harmonious process, rather than simply a series of educational and career lurches that throw us from one stage of life into the next. In the information age there is almost no difference between learning and doing; for the creation of knowledge will be the primary form of production in the future.

Next, I believe this new consciousness requires a sense of truth which allows for change in even the most cherished of our "absolutes." I have always liked the French writer Paul Valery's remark that "Whatever perishes from a little more clarity is a myth. Truth is the way the world is until further notice." This new consciousness must continually be about the business of discovering the chains which enslave it to unexamined presuppositions, which bind it to hidden prejudice. We must have absolutes to serve as the foundations for our values, but we must hold these absolutes provisionally as human beings in the process of becoming and leave to the deities the possibilities -- and the problems -- of omniscience.

This new consciousness must allow for personal conviction in a pluralistic world. Our leaders must have the ability to discover or create a set of personal values, to adopt these values as the basis of their commitments and actions, and to do so without depreciating the values and commitments of others as a prerequisite of their own convictions. At the bottom of a great mountain there may appear to be many different paths all heading off in directions different from our own, but in the end, if these paths direct those who walk them upward, they will all meet the same peak. We cannot act without values and convictions based upon these values but no one set of values, no one set of convictions, can serve to bring each and every one of us to our ultimate destiny.

And finally, this new consciousness will require a heightened capacity for judgement. The preeminent skill of the information age and the global village will be judgement, both sound, moral judgement and the critical judgement skills of analysis and synthesis. For it is this capacity for judgement which will help us to avoid cultural myopia in our thinking; it is sound judgement which will avoid historical and technological naivete in our decisions; and it is this important skill which will be the key element of the vision which will be necessary for leadership in the Pacific Century.

LEADERSHIP IN PACIFIC REGION HIGHER EDUCATION: THE PROBLEM OF INTERNATIONALIZATION

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Beginning in Eleventh Century Europe, the professoriate lived by, and benefited from, the "license" to teach anywhere. A unique element in the history of western higher education, this precept is today practised throughout the world. During the last quarter of the Twentieth Century, the airways have been well populated by academics and scholars traveling from their home universities to study, teach, research and consult throughout the world. Clark (1987) suggests that this ever widening involvement in the production and assimilation of knowledge is driven ". . . by the pace set in the international communities of many disciplines, with the biological sciences now the most visible instance" (p. 3).

Despite the increasing numbers of academics and students who move among cultures and continents, a significant problem remains relative to world and Pacific Region development of higher education. That problem concerns the ability of national systems of higher education to "internationalize," to receive, process and transmit the elements of regional economic, political and social development. Use of the term internationalization is problematic. For many people in traditional societies internationaliation means Westernization or even Americanization and is not, therefore, an automatically desirable goal. For the purpose of this discussion, internationalization in higher education means the free flow of students, scholars and teachers, educational ideas and practices across Pacific Region national boundaries. This paper seeks to identify the problem of internationalization as unique to the Pacific Region and to define several subsets of issues for higher education leadership.

Permeability, Adaptability and Higher Education

Robert Cope (1985) in his study "Six Management Propositions for Economic Vitality in the Pacific Basin: A World Ocean Perspective" identifies the need for "permeability" and "adaptability" among national higher education systems

of the Pacific Region. Cope's thesis holds that Pacific Region economic, political and social development is dependent on, and may be understood through, analysis of six "propositions:" (1) the existence of economic centers with effective communication and transportation links among them; (2) pivotal national geographic locations within the Region; (3) the ability to produce quality products; (4) permeable boundaries which allow for the flow of information and new knowledge; (5) adaptive substructures, i.e., higher education, banking, communications, etc., capable of leading economic development; and (6) executive encouragement. It is the last three of these propositions over which national systems of higher education must show concern. Through the use of these terms, "permeability," "adaptability," and "executive encouragement," Cope is asserting that economic, political and social development of the Region as a whole cannot advance as swiftly or systematically as many would wish unless higher education systems identify and practice far more effective means to internationalize their activities:

> At present, neither the ideological contentions of Western conservatism/liberalism nor the ideology of Marxism appear to have clear relevance for the affected nations: therefore, an ideology of cultural-commercial development internationalism (emphasis added) around the concept of the Pacific Community may fill the vacuum (p. 92).

The concept of a Pacific Community, founded on an ideology of cultural-commercial development internationalism, may be just as elusive as the idea of internationalism applied to higher education. It, too, is subject to the chauvinism of Western thought from technologically developed nations. Despite the possibility of Western bias, Cope forges an argument which has implications for higher education in both traditional and technologically developed nations throughout the Region. Higher education's role in the development of a Pacific Community may be that of facilitating and speeding economic, political and social development or it may prove a deterrent, a missing element, in the realization of a Pacific Community.

Traditional societies have often supported study for select students at foreign universities. Currently, the People's Republic of China bears recognition for dispatching thousands of its young people throughout the Region as well as to Europe and Africa. The United States, Canada, Australia and New Zealand have actively received these and many other transient student populations for several decades. However, other technologically developed

nations of the Pacific Region have only recently begun to recognize the need for access to their institutions. Most notable in this regard is Japan, whose government now projects an influx of up to one hundred thousand foreign students by the year 2000 (Chapman, 1989). To date, however, over ninety percent of the few foreign students in Japan come from Asian nations. Japan has been far more successful in establishing collegial links in other countries to which Japanese students now flow in large numbers. Similarly, the Peoples' Republic of China, constrained by the need to develop a higher education infrastructure (Wang, 1988), enrolls few students from other Pacific Region nations.

Malaysia, a traditional society whose technological development is aided by massive foreign investment, now supports over fifty thousand of its undergraduates and graduates in countries around the world. Yet, its own state and private system of higher education hosts fewer than one hundred foreign students, an interesting fact when viewed in light of the 1.6 billion dollars (M) it received during 1988 in the form of foreign corporate investment (Bank Negara Malaysia, 1988).

Each of these countries, and their Pacific Region neighbors, views its higher education system's development in terms of national agendas. Japan genuinely seeks to share its expertise in graduate technical fields with Regional partners but its altruism is mediated by projected declines in the nation's college going population by 1993. Malaysia notes well the advantages of sending students abroad for the benefits to the nation in science, engineering, commerce, finance and education. Yet, it leaves unasked the question of greater understanding and success which foreign bankers, educators, merchants and engineers might experience had they access to Malaysian higher education.

Technologically developed nations like the United States and Canada are seeking to focus commercial attention on the Region and to receive increasing investments from Asian Regional players. However, relatively few American students enroll in Japanese, Korean, Taiwanese, New Zealand or Australian Universities even given the history and ability of several of these systems to accept significant numbers of expatriate students. A constant debate is now heard in the United States over the need for university graduates prepared in foreign langauge, commerce and culture. Little is heard of the disparity between inflow of foreign students and outflow of American students to foreign

centers of learning. Surely this situation is well noted by higher education leaders in Asian countries. The unmistakable message is that Asian students are welcome to learn Western ideas and skills in the U.S. universities but that the equivalent in knowledge of the East is not valued by leaders in North America or other Western centers of learning.

Higher education plays, and will continue to play, a most significant role in the Region's development. It should be of increasing concern, however, that existing national systems, keyed to national goals and aspirations, are less than permeable (porous; open to regional diffusion) and less than adaptable (able to adjust and compensate). While often succeeding with national agendas they may obstruct or even ignore Pacific Region development or, as Cope (1985) puts it " . . . the prospect of effective commercial-development internationalism" (p. 92). How might higher education in the Pacific Region be rendered more permeable, more adaptable?

Physical and Intellectual Subsets of the Problem

Even casual observation will suggest that higher education systems constantly grow more complex. This is true, as Burton Clark (1987) has surmised, no matter how large the differences in systems, differences that grow from unique cultural traditions:

> With each passing decade a modern or modernizing system of higher education is expected and inspired to do more for other portions of society, organized and unorganized, from strengthening the economy and invigorating government to developing individual talents and personalities and aiding in the pursuit of happiness (p. 2).

National systems of higher education appear to move from elite to mass participation, in a few cases, reaching for universal access. In turn, the complexities of instructional tasks multiply in proportion to shifts in access. Similar increases in complexity may be found in research and service to the community and other traditionally stated missions of higher education. Complexity in these spheres also increases the complexity of administrative functions.

For Clark (1987), this problem of handling the complexity of tasks andv responsibilities is the root problem of system adaptation. Higher education leaders throughout the Region face the constant and growing diversity of tasks associated with adapting their institutions to progressing national agenda. But as we have seen, national agenda vary widely among countries given their technological status and cultural traditions. Clark asserts that most modern

systems of higher education adapt to these demands using a number of systemic accommodations, the most important being "structural differentiation:"

> . . . structural differentiation (is) an adaptive trend that in its various forms deconcentrates the over-all system. Closely related is the elaboration of academic professionalism, within which academics specialize their interests and commitments in a widening array of subjects and institutions (p. 7).

Careful observers are treated to constant sights of institutional expansion, enlargements of systems, creation of new types of institutions and, within institutions, the creation of new institutes, departments, centers and faculties along with the professional societies and associations that develop to legitimize these initiatives.

On an institutional level, it becomes difficult, if not impossible, to treat persistent deconcentration let alone to identify and act on implications for the implications for the establishment of more permeable and adaptive systems. For leaders in many Pacific Region nations, this problem is manifest in so common a human characteristic as language, both spoken and written. Researchers at the East-West Center in Honolulu, suggest that American undergraduate and graduate students require three to five years of intensive study in Japanese or Chinese to acquire even modest scholarly ability with those languages. How are administrators and faculty members to accommodate so long and intense a learning period? In this case alone, the physical and intellectual impediment to greater permeability/adaptability appears almost insurmountable.

Equally difficult to ponder are the expanded range of problems identified by Shantakumar (1987), with reference to the internationalization of higher education in Singapore. He suggests that varying educational standards employed in tertiary education by the nations of the Region become a problem as students seek to transfer from system to system. The problem may be viewed from the perspective of employers receiving a workforce with different qualifications. Lack of qualified teachers, capable of coping with the demands of multicultural learning patterns offer another challenge. Additional problems may be encountered as institutions seek to broaden the training of teaching staffs, employ increasing numbers of part-time instructors, of bring foreign professionals in to conduct instruction. Labor market discrimination also bears note as an impending issue. In this case, discrimination may play a

role depending on the degree to which employers from host and sender nations choose to favor selected, usually Western, universities.

Professor Shantakumar adds to his discussion the issue of values influx, viewed as a difficulty for relatively closed societies, and facilities constraints which, in traditional societies, may argue against the ideal of internationalization, particularly if the term is understood to mean Westernization.

Facility with the host language of instruction still leaves gaps in students' and faculty members' ability to cope. Only now are researchers and scholars in the field of multicultural education (itself a recent Western scholarly permutation) beginning to discover the gulf which exists among students from different cultural backgrounds. Several national systems have made a beginning at coming to terms with the integration of ethnically and culturally distinct native populations. This is particularly true in North America with native Indian, Hawaiian and Eskimo populations and in New Zealand with Maori and Australia with Aboriginal populations. Creation of a knowledge base for dealing with the integration of native populations may be helpful to understanding Regional issues of permeability and adaptability, but the Regional problem remains one of a different nature and operates on a different scale.

Tharp and D'Amato (1988) have examined the topic of ethnic variability particularly as it relates to achievement in formal educational settings. Their work is among the first to codify the domains and models employed by researchers from around the world who, to date, have dealt mostly with indigenous populations.

The Tharp and D'Amato review identifies three substantive domains for research in the field: ". . . (1) elementary and secondary education, (2) higher education, and (3) vocational education (which spans secondary and postsecondary education, from junior high students to adult workers enrolled in training courses in industry)" (p. 3). The researchers report that theoretical models used to account for ethnic variability fall into four categories: ". . . (1) individual attributes models, (2) social effect models, (3) instructional effect models, and (4) cultural difference models" (p. 4). These models have been applied in over a thousand studies which are, in turn, anchored in one or more of the substantive domains.

In summary, physical and intellectual constraints to the creation of greater permeability and adaptability are formidable and exist in at least three forms: (1) those which concern systemic accommodations including the deconcentration of higher education institutions and national systems (physical); (2) those which concern both physical and intellectual constraints such as language barriers, labor discrimination, varying educational standards among systems and the availability of facilities; and (3) the intellectual challenge of recognizing and coming to terms with variables which define and allow for further study of ethnic variability. All three must be considered in light of Western bias which pervades discussions of internationalization in the Region.

Leadership in Pacific Region Higher Education

Most nations of the Pacific Region employ elaborate schemes for the education and training of elementary and secondary school leaders. Few nations treat the preparation of higher education leaders in a systematic way. Among the nations which do devote resources to the task is the United States where over eighty institutions offer graduate preparation at the doctoral level in the fields of higher education management, administration, student development, curriculum development, and so forth. Yet, these programs appear mainly to serve as bridges for persons interested in staff and mid-management roles or as leads to careers in institutional research. The tradition of universities, particularly research universities, being headed by academicians from the arts, humanities and sciences, remains largely unchallenged, at least in the Western countries.

Japan has sponsored the Research Institute for Higher Education at Hiroshima University. The Institute is degree granting at the doctoral level. But as in the United States, the graduates of the Institute's program seem to seek careers in research and teaching. The research output of the center is geared toward policy analysis and Pacific Region studies. In Australia, the University of New England maintains a department devoted to study and teaching in the field of higher education administration and at least one New Zealand university seems poised to address the formal study of the field. Dankook University in Seoul, Korea, and the University of Hawaii now share a grant from the U.S. Government to develop higher education leadership studies at Dankook.

If the collaboration is successful, the effort will mark the first such development in Korean higher education.

Perhaps more important than these still sporadic attempts to prepare leaders are regional professional associations which number among their members a highly diverse group of individuals interested and/or engaged in study of the field. At an international level are the Pacific Region Association for Higher Education (PRAHE) and the Higher Education Research and Development Society of Australasia (HERDSA). PRAHE's membership ranks tend to include members from the Northern Hemisphere. HERDSA's members tend to come largely from Australia, New Zealand and Southeast Asia. Both organizations sponsor yearly international conferences which treat a wide variety of topics in the broad field of higher education studies. Neither association has as its main goal the preparation of leaders but each seek to provide a forum relative to higher education's development needs on a Regional basis.

Nation based associations for the study of higher education are also visible around the Region though none of them can be said to foster an agendum specifically related to Pacific Region leadership. Prominent among the national associations is the Association for the Study of Higher Education (U.S.) and the Canadian Society for the Study of Higher Education. On a quasi public level are such organizations as the American Council of Education and the Korean Council for University Education. Both were established for institutional members and both sponsor significant research which is largely related to their respective national systems though both have distinguished records in promoting international exchange among institutional and governmental higher education authorities.

More recently, the Region has seen the development of a few centers devoted to higher education research that could be termed international in scope. The Comparative Higher Education Research Group at the University of California, Los Angeles, is well known. Newly established is the Center for Studies of Multicultural Higher Education (CS-O-MHE) at the University of Hawaii. While the products of these, and centers such as Hiroshima, deliver significant information to leaders throughout the Region, they do not engage, as a priority, in the preparation or further training of academic leaders but rather researchers and scholars.

Finally, a current development in the Region bears notice. That is a newly formed institute, known as PAHELI (Pacific-Asian Higher Education Leadership Institute) at the University of Hawaii in Honolulu. Its purpose is to provide intensive further training to practicing higher education leaders from throughout the Pacific Region. Just as centers at Harvard and the University of London have for years provided intensive programs of four to eight weeks for practicing administrators, the Hawaii Institute seeks to provide similar service through recognition of the unique needs of Pacific Region higher education administrators. The creators of the PAHELI idea seek to emphasize professional development, academic management skills and cross-cultural awareness by identifying both Asian and Western management perspectives. It remains to be seen whether a true integration of practices and perspectives can emerge or if Western ideas will maintain hegemony. The first PAHELI class will matriculate for a three week course in late November, 1989.

What emerges from this brief review of professional development programming is a mixed and sporadically available set of opportunities. At the very least, it can be claimed that existing Pacific research and teaching institutions and the professional associations that treat higher education studies are without primary focus on the Region as a whole. What is more, their products (new knowledge, trained scholars) vary widely in kind and quality and may be less transferable than necessary. The sum of these various programs, associations and centers cannot begin to offset the need for attention to the issues of more permeable and adaptable higher education in the Region.

Implications for Leadership Development in the Region

Cope (1985) identified six propositions for economic vitality in the Region. Two of them, permeable boundaries and adaptive substructures, were defined and discussed earlier. Discussion of the third, "executive encouragement," bears special attention here:

> . . . the set of six propositions calls attention to the role of the chief executive toward the creation of new products-executive encouragement. The "chief executive" is the office of the CEO, or the president, or vice-chancellor, or premier depending upon the entity. New products may mean an attitude, backed by legislation, to encourage the development and marketing of new goods or services (p. 93).

It is possible for this type of higher education leadership to emerge or flourish within the Region? The evidence, including preoccupation with national agenda, problems of focusing on Region centered as opposed to Western biased topics for research and the mixed opportunities which exist for professional development, seems to offer a negative answer. This answer may imply that we are bound to struggle forward, sometimes leading national agenda, occasionally addressing Regional agenda, but rarely recognizing the role that higher education might play as a leading substructure in Regional development.

To the degree that higher education in the Region neglects its broader role, it might be implied that:

(1) National systems of higher education will continue to treat their own strategic plans (where such plans exist) in isolation from trends in Regional development;

(2) Regional development and the concept of Pacific Community will be constrained, to a significant degree, by the persistent lack of permeability and adaptability in the higher education systems of the Region;

(3) Individually, educational leaders throughout the Region, will continue to face frustration in efforts to internationalize their institutions and systems, particularly if internationalization is understood to mean Westernization or Americanization;

(4) Educational leaders will continue to identify a scarcity of professional development opportunities (research, training and study) aimed at facilitating action in support of Pacific Region development.

Conclusions and Proposals for Discussion

It was the objective of this paper to define several problems related to internationalization of higher education for support of Pacific Region economic, social and political development. Permeability, adaptability and executive leadership reveal special subsets of problems and issues for higher education when viewed among Cope's six propositions for Regional economic vitality. Further discussion of the issues and problems raised here is warranted. As a starting point, participants in this conference are encouraged to consider the following proposals for action, remembering that Western

science and technology cannot be provided to other areas within the Region without imparting Western values and ideals:

(1) Establish a Regional Information Clearing House on the Internalization of Pacific Region Higher Education.

(2) Regionalize the graduate training programs of several existing centers, i.e., University of Hawaii, University of New England, University of California - Los Angeles, Hiroshima University.

(3) Expand the study of the national higher education substructure's systemic role in Pacific Region Development through creation of a research center dedicated to this issue.

(4) Expand the study of problems inherent in the internationalization of institutions and national systems of higher education through expanded government support for nation based research.

(5) Increase the emphasis on the gathering and interaction of scholars, administrators and government authorities from the Region through joint conferencing and publication among existing professional associations.

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EDUCATING MANAGERS FOR THE MULTICULTURAL WORKFORCE

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The state of California, considered by forecasters to be a bellwether state, in 1989 had a "non-white" majority in its school system for the first time since statehood. Hawaii has always been a multicultural state with a non-white majority. (White minority was 25% on the 1980 census.) The USA is the only nation in the world with people from all 162 nations of the world within its borders. The United States and the world are rapidly becoming multicultural, multinational and global. Managers are needed who can lead people and organizations in the transitions necessary for this multicultural, global world and toward an effective society in the Twenty-first Century. Rapid technological and social change and an increasingly global economy require adaptive organizations throughout the world.

Organizations in the United States are beginning to recognize that not only multinational companies but also domestic companies with multicultural workforces require transformational leaders. Educating citizens for the global world and managers for multinational, transnational and global organizations must be a priority for education, government, and business. By the year 2000 our society and the workforce will look very different than it did in 1980. Diversity will be the norm, with greater age, gender, and ethnic variety and a shift to an older population, more women working, and increasing numbers of ethnic backgrounds.

Let's review some of the relevant trends affecting business, education and society in the next decade leading to the year 2000, and then consider the implications for organizations, managers, educators and government. The economic and social trends which have led us to a global world may need no introduction for this audience. The necessity for a global perspective in the United States and the world confronts us daily in the media and in our daily lives. The importance of this global, multicultural perspective for business, education and management is becoming increasingly evident. A review of some of

the major social and economic trends which will affect business, education and society in the 1990's and the 21st century will serve as a framework for the discussion. United States experience and data predominate in these trends. Since most management training is based at least in part on the United States model, there is some justification for this ethnocentricity, however antithetical it is to the cultural savvy premise. But the requirement for skills in multicultural management is worldwide, not limited to the United States or to multinational and transnational companies:

TRENDS:

DEMOGRAPHICS	DIVERSITY
Women	
Baby bust	
Ethnicity	
The greying of society	
NEW TECHNOLOGY	SKILLS
Industrial technologies	
Information technologies	
Lifestyle technologies	
Biotechnology	
Transportation technology	
ECONOMY	ADAPTABILITY
Global	
United States changing role	
Service industry growth	
Atlantic/Pacific balancing	
Regional alliances	

"International is not overseas" appropriately describes the world for most nations today, and was the title of my panel last year in Los Angeles, where most companies have multicultural workforces, as well as foreign capital and ownership. This year, 1989, California passed New York as home to multinational companies with 150 multinational manufacturers, up from 108 in 1987, with strong links to the Far East, indicating both multinationalism and the shift from Atlantic to Pacific.

The United States is not alone in this emerging multiculturalism. Russia has its ethnic minorities who are speaking out and demanding attention and equity. China is not monolithic, but composed of historic ethnic diversities. There are at least five, distinct, major, ethnic and cultural groups in China, each with its own values, beliefs and customs and the Republic of China is held together tenuously with a common goal of development. The European Economic Community which looks toward 1992 as its milestone has a multitude of economic

and cultural diversity issues to resolve and manage if it is to function as a community. So that learning to manage this diversity effectively is a common objective for all of us.

IMPLICATIONS OF THESE TRENDS:

What are the implications of these trends for companies and for organizations? In general the workplace of the future will be characterized by increased technology and a consequent increase in the demand for skilled workers, with scarcity, diversity and a growing requirement for skills training characterizing the workforce.

Productive societies and productive organizations are based upon people with distinct and individual talents and goals working together effectively toward a common goal and achieving satisfaction in that process. Human resource management often seems to be based upon an underlying assumption of a homogenous workforce. The workforce of the future will not be homogenous. It will be characterized by diversity and mobility. This workforce of the future is a key to survival and success for the 21st Century and must be a priority consideration for planners, leaders and managers in all segments of society.

The skills needed to manage successful organizations with this multicultural workforce in a global environment are varied and complex. Managers must be able to work effectively with diverse groups of people in a rapidly changing environment. The curriculum for such managers must include the usual management subjects ranging from international economics, international finance, accounting, information systems and international law to human resource management and personnel practices, plus a foreign language.

Additionally, there is an important requirement for a radically different skill which I have termed "culture savvy" in my article "Cultural Savvy: The Essential Factor," Multinational Business, The Economist Intelligence Unit, Summer 1987. This term was coined to cover a complex of skills and attitudes necessary for the multicultural manager. Simplified and summarized, "culture savvy" includes an ability to celebrate and value diversity, the ability to develop relationship skills -- relationships of ideas, people, groups and nature, and the ability to become a manager of process as well as projects. Culture savvy requires being able to shift one's own assumptions, worldview, and mindsets, and facilitate that shift in others:

SHIFTS:

FROM	TO
Project	Process
Task	Relationships
Single world view	Diverse possibilities
Bureaucracy	Networks
Certainty	Ambiguity and change

Let's look briefly at some possible types of organizations within which managers will carry out the missions of their businesses in the future:

POSSIBLE TYPES OF ORGANIZATIONS:

DOMESTIC ENTERPRISE
Operates solely within its own country, using domestic suppliers and producing and marketing services and products to customers at home.

EXPORTER/IMPORTER
National business that markets in foreign countries but uses primarily domestic competitiveness and advantage, using independent agents or distributors. Limited understanding of trends and events beyond borders.

MULTINATIONAL OR TRANSNATIONAL
Supplements international sales with localized international production and sourcing. Import/export move freely within infrastructure of multinational corporation. Often multidomestic with each national or regional operation independent of company's other operations. Centralized corporate strategy with shift to local marketing selling to manufacturing in other countries.

GLOBAL
Extension of multinational with constant scanning, organizing and reorganizing resources so that national or regional boundaries are not barriers to potential products, opportunities and locations. Delivers products or businesses in best markets from lowest cost positions with most appropriate management resources without regard to where dollars, people, resources and technology reside.

An important distinction of a global enterprise is a global strategic perspective, with cross-cultural integration combined with a localized sense of customers and competitors. A shift must be made from the tight control of a bureaucratic model to an entrepreneurial, flexible, rapid-response capability that is totally comfortable with cross-cultural influences and conditions. A global strategic sense with a broad-based resource, technology and marketing allocation scheme must be combined with a localized customer focus, knowledgeable about regional and local conditions, culture, behavior and values.

SKILLS NEEDED TO MANAGE THIS GLOBAL ENTERPRISE:

SCANNING THE ENVIRONMENT
Assessing and understanding major internal and external influences to achieve competitive advantage from a global perspective.

GRASPING OPPORTUNITIES
Understanding competitive strategies that operate outside the confines of domestic market.
ORGANIZATIONAL VERSATILITY
Rapid and continuous response to opportunities and threats with resource allocation, strategies and human behavior.
EMPOWERING PEOPLE
Understanding valuing and celebrating diversity.
Managing teams and alliances.
Managing change and chaos.
Helping self and others:
Adapt to change.
Create balance in life.
Create new roles, new forms, new structures.

How do we educate for these skills and attributes? The basic principles of adult education are appropriate, with different techniques needed for learning in the three areas of knowledge, skills, and attitudes. Learning is most effective when it is self-directed, experience-based, the learner has a readiness to learn and the learning is problem-centered in areas which are relevant to the learner's life situation. The new skills are attitudinal, structural and programmtic.

The process must include:
1. New knowledge.
2. Experiences to utilize knowledge.
3. Reflection on experiences.
4. Opportunity to try new behaviors.
5. Feedback on new behavior.

Learning the skills of multicultural management requires all the creativity we can muster. A need to learn and to change must be stimulated -- by imparting information, providing experiences and opportunities which lead to the realization of the need for new skills and knowledge, and sometimes by policies and laws. Attitudinal learning must have a priority position in the education of multicultural managers, because cross-cultural management requires a shift in worldview, a shift in mindset, in metaphors by which we describe the world, even in the myths which give it meaning, and an awareness that one is inside one's own culture, which then serves as the basis for becoming aware of different views of the world.

To summarize in one phrase, the multicultural manager must have "culture savvy" and the most important skills leading to this are ability to LISTEN and the ABILITY TO SHIFT MIND SET or WORLD VIEW, and the two go together. A quick definition of culture, which I find useful in training multicultural managers,

is "a group with shared assumptions about the nature of reality." Those shared assumptions may be ethnic-centered, nation-centered, religion-centered, gender-centered, or as sometimes happens in organizations, function-centered, the financial culture or the marketing culture. Learning to understand, work with and value diverse cultures is a powerful tool, which requires a degree of self-awareness and an openness to learning about one's blind areas and learning about different assumptions about the nature of reality which may be in conflict with one's own deeply held assumptions. Above all, it requires the ability to listen to another's reality as well as one's own.

The design of multicultural management requires inputs from all levels of the learning paradigm: knowledge about the importance of understanding and utilizing diverse cultures, combined with knowledge of trends in the workforce and business; self-diagnosis, and experiences which help to "break mindset" and opportunities to interact with another culture, combined with the development of sufficient trust to be able to hear about one's blind areas; and an opportunity to practice new and different behaviors in cultural communication. We know some things about helping managers/people to attain this perspective, but the learning and the learning to teach are ongoing and these evolving processes must be given a priority as we move into the global, multicultural society of the 21st Century.

To summarize a previous section, we must learn more about educating managers to:

1. Scan the environment.
2. Empower people:
   Men, women, old, young, of all ethnic, religious and cultural types, physically able and less able.
3. Grasp opportunities:
   Employment, ideas, business, organization and remove practical obstacles to taking advantage of opportunities.

Some major constraints which will stand in the way of achieving effective organizations and supporting the skills of multicultural management are polarization -- defining the world in either/or terms of black/white, right/wrong, mine/others and trying to maintain one group's or individual's privilege amid a rapidly changing world. Investing in the future means investing in people, and we have no choice but to do it. In this global world we need the best people and the best managers for our mutual survival as we "think globally and act locally."

THE FAILURE OF EDUCATIONAL REFORM IN CHINA AND THE STUDENT MOVEMENT AS ACADEMIC REVOLUTION

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> Bliss was it in that dawn to be alive
> But to be young was very heaven! O times
> In which the meagre, stale, forbidding ways
> Of custom, law, and statute took at once
> The attraction of a country in romance!
> When Reason seemed the most to assert her rights
> When most intent on making of herself
> A prime enchantress--to assist the work
> Which then was going to forward in her name!
>
> William Wordsworth
> The Prelude, Book 11

Asked what he thought was the significance of the French Revolution, Zhou Enlai is reported to have answered, "It's too soon to tell." So close in time to the Spring Uprising in Beijing, how are we to fathom its significance, its origins, its aims. To begin with, perhaps, we need to recognize the sheer spontaneous combustion of it all. It was more a commemoration and a celebration of past events than it was an organized crusade on behalf of any particular political or social agenda. In many ways, it was a demonstration for the sake of demonstrating--a dramatization of "Ode to Joy" (which, along with the "Internationale," was the protesters' theme song at the square). Up to even the last few tragic hours, its mood was always festive and contagiously jubilant. If you were there, you couldn't stop your arm from raising the "V for Victory" sign.

This massive, spontaneous uprising took aim at every possible band of the Chinese political and social spectrum. The targets of the big-character posters and parade banners were corruption, inflation, senility and obsolescence, bloated bureaucracy, and suppression of human rights and freedom. And it mushroomed by accretion in the face of an amazing confluence of circumstances which it sought to commemorate and at times re-enact. The first

of these, the death of Hu Yaobang on April 15 gave it its political coloration and most importantly its particular Chinese hue with respect to its so-called "pro-democracy" theme. Hu represented the realistic possibilities of political participation and modernization within the marked constraints of a largely closed society. It was Hu who was sacked by Deng Xiaoping after the earlier student demonstrations in 1987 and his death triggered a delayed retaliation against the Deng regime for its actions two years earlier. Hu's image will be the enduring icon of the 1989 crusade, not the Styrofoam goddess trampled by the tanks at Tiananmen.

If Hu Yaobang's death signals the political side of the struggle, the commemoration of May 4th Movement represents its cultural and academic dimensions. On May 4, 1919, Beijing students denounced the government for its pusillanimity in allowing Chinese territory to be ceded to Japan. "That generation determined to tear the shop of Confucius and Sons and transfer its custom to the new merchants in town, Mr. Democracy and Mr. Science."[1] Like the great upheaval seventy years before, the 1989 Movement was a generational conflict between the forces of the Old and New China. In a system without a genuine legislature or electoral system, students saw themselves in both Movements as the moral and political conscience of China, and this gave justification to their activism and direct confrontation of the authorities. In both epochs, there was a yawning chasm not just in age but in ideology and perspective between an octogenarian autocracy and an audacious group of young reformers. The contest pitted the Long March generation against those reared on Western technology and values--a situation remarkably parallel to that of 1919 in which bold intellectuals like Zhou Enlai confronted an old-fashioned elite reared in an Imperial regime.

In the anniversary of another revolution we find a deeper representation of the cultural conflict and inevitable bloodshed that ensued. Like their citizen counterparts in France two hundred years before, the young Chinese revolutionaries campaigned against rampant corruption, unfair distribution of wealth, and stagnation in education as they proclaimed that "individualism" was to be the criterion for judging the worth of political ideas. The students at the square and those at the Bastille were the apostles of public virtue, as they linked arms, swore daring oaths, and intoned their hymns to liberty, and marched to meet their Armageddon. Like France's <u>ancien regime</u>, China's socialist dynasty was associated with senescence and encrusted in anachronisms

that jarred harshly with the realities of a technological age, with the Glasnost revolution in the land that influenced their own revolution just four decades ago, with the seductive consumer (not dialectical) materialism flashed nightly in the television advertisements.

As Perry Link and others noticed, during the gestation period preceding the Spring revolt, a kind of "fin de siecle" mood swept China, which had its darker manifestation in the racial attacks against African students who consorted with Chinese female students. (A deep resentment against Africans can be traced to the earlier days of Mao's regime when China sent massive aid to struggling Marxist countries in Africa as a gesture of China's benevolence and, according to Mao's critics of the time, as a superiority ploy.) The spring struggle contained many signs of a volcanic Kultur-kampf, pitting China's youth against its traditions and institutional authorities. This was prefigured in the spectacular six-part film River Dirge (He Shan in Chinese) broadcasted in the summer of 1988 and seen by hundreds of millions of Chinese. The film uses striking video images and literary references to provoke scathing criticism of China's most revered symbols, particularly the Yellow River which serves as the symbol of despotism, secrecy, and stagnation. Shown in the context of other ancient monuments like the Great Wall and the ancient terra-cotta figures buried with Emperor Qin, the river represents both the natural disaster of repeated flooding and man made holocausts like the Cultural Revolution. By contrast, the Pacific Ocean, into which the ancient river flows, becomes the symbol of the 21st Century and represents the life-giving force of democracy, science, and openness. At end of the series, the narrator explains the obvious meaning of the film. "Reform on a deeper level means a major transformation of the civilization--a painful, dangerous, and arduous process that may require the sacrifice of this generation or of several generations to come. We are standing at the crossroads: either we let our ancient civilization fall never to rise again, or we help it to acquire the mechanisms for a new life. Whatever we do, there is no way that any of us can shirk our historical responsibility."[3]

Metaphorically and at times quite literally, River Dirge portrays the spilling of blood and human sacrifice that the world witnessed that balmy June night at Tiananmen Square. He in Chinese means river and shang means "the premature death of someone who has not reached adulthood" (or age 19 in China). Taken figuratively, this may refer to the premature death of Chinese

civilization before reaching maturity, or is it may be a reference to the past holocaust and a macabre foreshadowing of the human sacrifice of China's youth before the armored Leviathan. Shang as in the phrase guo shang signifies "dying for the affairs of the nation."

Whatever the meaning, the concentration on death especially in the opening scene of two dead youths in their kayak who tried to be the first to travel the full length of the Yellow River is a haunting foreshadowing of the sacrifice of thousands of China's bravest and best who went to their death that warm June night. For what did they give their lives? What will be the proper memorial to their sacrifice?

THE ACADEMIC REVOLT

These Chinese students of the fourth socialist decade lived in a world in which capital replaced custom and traditional privilege. As one of my graduate students remarked upon returning to China after spending five years in the West: "Before money was nothing; status and political power was everything. Now, if you have money, you can get anything you want in China--anything!" In a somewhat ironic twist, theirs was a protest against Deng's economic reforms as they transformed the economic class system in China. Throughout history, scholars sat in their first estate, followed by farmers, workers, and businessmen. But in the inchoate stages of capitalism of the Deng decade, the estates were inverted completely, with businessmen, taxi drivers, and farmers making ten or more times the wages of university teachers. It is the thesis of this paper that despite its political and social manifestations, the Spring Student Movement of 1989 was rooted in expressions of discontent with academic life and that the true nature of the uprising was as an academic revolution, not some vague pro-democracy crusade as portrayed by t loid TV commentators, who went to Beijing solely to cover Gorbachev and found a "political revolution" on their hands.

Deng Xiaoping and the Failure of Education

In a highly publicized speech delivered on June 9 to the military commanders of the martial law enforcement troops, Deng explained what he really meant by "the failure of education:" "I once told foreigners that our worst omission of the past 10 years was in education. What I meant was political education, and this doesn't apply to schools and students alone, but to the masses as a whole. And we have not said much about plain living and the

enterprising spirit, about what kind of a country China is and how it is going to turn out. This is our biggest omission."[3]

Deng was referring to an earlier speech he had given to a session of the National People's Congress in which he avowed: "Our greatest mistake of the last ten years was the insufficient development of education."[4] But after the June 4th massacre, he was attempting to put a different "face" on the educational crisis by labelling it a "political" failure instead of an academic and administrative catastrophe.

China's entire education system is a failure not of ideology but one of systematic neglect and devaluation by those at the center of power, particularly Deng himself. Most of the problems in education are a result of insufficient investment; the remainder are a consequence of corruption and inept management. China contributes only 3.7% of the GNP for education, a rate lower than 100 other countries. The education budget per person equals one-fourth of that of other developing countries. Accordingly, salaries for teachers are below those of factory workers, bank employees, and technological personnel. Before the June 4 massacre, the average cab driver in Beijing could earn six thousand dollars a year, about five times as much a university professor. But even this meagre investment would yield greater dividends if the funds were not misused. Between 1985-86, for example, a government audit uncovered the misuse of 500 million yuan (about $125 million U.S.) for official buildings, personal cars, and frivolous business activities by high officials. Urgent appeals for reform and correction of abuses began to appear in many of the state-controlled organs. An Economics Weekly article in late April of this year called for an immediate end to luxury spending and corruption, an increase in tuition fees for middle school students, increase in admission of self-supporting students to the university, and the creation of private schools supported by foreign investors.[5]

As a recent article by Shao Daosheng in the Guangming Daily points out, Deng has been unable, or unwilling, to heed the call for reform and translate his own rhetoric about education into action. Despite the consistent attention to the subject, beginning with Deng's pronouncement in 1977 that the key to modernization of technology and science is through education and continuing ten years later with his hand-picked successor's (Zhao Ziyang's) address to the 13th National Congress about the strategic importance of education, the Deng regime can point to no substantial improvements in education, especially by

contrast to the impressive economic gains accomplished during the same decade. It is in this jarring incongruity that many believe lie the roots of the Spring Uprising that quickly accelerated from a memorial for a noble comrade to a reenactment of the May 4th Movement that had transformed China seventy years earlier.

Student Demonstrations Reflect University Conditions

Before the world's television cameras, the students demonstrated on behalf of such lofty ideals as freedom, a higher standard of living, and a clean and efficient government, all of which they associated with "democracy." But these ideals assume a more concrete dimension if one considers the typical conditions on campus that impede the advance of knowledge and stifle individualism. In fact, it is at the universities and colleges that one finds some of the most excessive instances of control by the CCP over the lives of students and faculty.

On campus, the students must study what they have been assigned by the central authorities. Those with the highest scores on the national entrance examination study the sciences; those with the next highest scores study the social sciences; and those with the lowest marks study the humanities. Once assigned to a field of study, the student is unable to switch programs. As one student put it, "I'm stuck here with a subject I don't enjoy. I've begged them to let me change but it's not allowed."

Life on campus is Spartan. In a university dormitory, there are four beds clumped beside four small desks and chairs, and not enough room for a bookcase. But there is no need for one, for the only books used in most courses are the pirated texts. Students must wash their clothes on the ground in cold water. Most classrooms and dormitories have no fans to combat the intense heat of the late spring and early summer months during which students are still attending classes. The conditions in winter require equal stoicism. And after gaining a degree within such conditions, a student is placed in a position by the State Education Commission with a meager salary and often in a position in which he is over-qualified.[6]

Graduate education faces even greater problems than does undergraduate studies. Many of the most talented students do not continue with their graduate studies because of the harsh conditions facing them on campus. Several schools are unable to fill the places allocated them (a total of 32,800

places exist) for advanced studies. At Nanjing University, only 84% of the places were filled; 71 failed to show up at Fudan University. As a doctoral student at Nanjing put it: "It is difficult for us even to live, never mind research, on just 80 yuan [about $20 U.S.] a month, especially with inflation." That student quit his studies in favor of going to work in the Shenzhen Special Economic Zone. Married students face the additional problem of having to live apart because of cramped housing conditions on campus. As a result, a growing number of students either quit school for employment or they travel abroad for for advanced study.[7]

Academic Blockage.

Of the 400,000 university faculty at China's 1,075 universities and colleges, about half are below the age of 40, and it is these younger faculty who face the greatest hardships. They are disenchanted by the housing shortages, low pay, and, most of all, by the slim chances for promotion to professor. Many lecturers at People's University, for example, live with in one room with their spouse and infant. At that University, there are 300 married faculty on a waiting list for housing assignments. At Beijing University, 70% of the young faculty must live separately from their spouses.

Lecturers earn a monthly wage of 97 yuan (less than $30 U.S.) with little hope for promotion to the position of professor. At People's University, with a faculty of 1,000, only eight associate professors are under the age of 40. Qinghua University has only three "young" associate professors.[8]

Thus, the seeds of the 1989 rebellion were sown in the soil of austerity and suppression on campus. Students and intellectuals, especially those who have studied in the West, became archly critical of this system and of those government officials like Deng Xiaoping and Li Peng who failed to deliver on their promises of reform and modernization.

SPRING MOVEMENT AND EARLIER DEMONSTRATIONS

In many fundamental ways, the 1989 uprising was a continuation of the 1986 student protests which centered on two related issues: Academic Freedom and Institutional Democracy.

Throughout the period of the "Great Awakening" in China, the two ideals of academic freedom and political freedom have been inextricably linked. "If a person is constantly anxious when putting pen to paper or giving a lecture, and

constantly worrying which of his formulations will go beyond the bounds of what is considered to be an academic problem to become a political problem, then he has no choice but to keep his mouth shut. . . . If we agree . . . to draw distinctions between academic and political problems, that is equivalent to saying that we have agreed--or at least given our tacit assent--to the assertion that academic problems can be discussed but political problems cannot. If citizens do not have the right to air their views on politics, then politics remains a forbidden zone, and people will still unavoidably warn each other that 'disaster comes from careless talk,' and will try to avoid 'incriminating themselves by what they say.' What kinds of masters of the state will they be? Then will not the concept of 'high-level democracy' be simple nothing more than ideal theorizing?"[9] Thus, students and intellectuals recognized that economic modernization, academic freedom, and political freedom were all part of the same cloth and that China could not pursue dictatorship and decentralization simultaneously.

The need for greater freedom in the classroom and the laboratory was enunciated in China's first "White Paper on Science and Technology," September, 1986: "Scientific research is a kind of creative mental work. Scientists and technologists should be able to enjoy freedom to think, study, and debate. They should also have the right to stick by and to publish their own opinions, to criticize and answer criticism. Respect for academic freedom is an expression of respect for people's democratic rights and for human intellectual creativity. It is not up to administrators to conclude what is right and wrong in academic fields. . . . Right and wrong can be determined only through free discussion and the test of practice. . . . Leaders should listen to scientists and technologists and encourage them to think and debate freely. Before decisions are made, scientists and technologists should be praised if they offer different opinions. It should be absolutely forbidden to criticize opinions as being 'not in line with the Party'. . . . To guarantee freedom is not only the duty of leaders, but of all scientists."[10]

In November (1986), a research fellow at the Institute of Natural Sciences at the Chinese Academy of Sciences, Xu Liangying, asserted "academic freedom must be protected and ensured politically by a democratic system. . . . The disputes between Marxist and non-Marxist ideologies should only be settled through free discussion. . ." Xu further pointed out that China should emulate Western democracy in which people can freely express their opinion without fear

of persecution. There, people are no longer burned at the stake as heretics because they have uttered a controversial point of view.[11]

But the Party hard-liners, and even to some extent the liberal reformers as well, feared that by granting greater academic freedom they would open the floodgate of attacks on the entire political system as other groups would clamor for their share of "bourgeois freedom."

This reflected an earlier dichotomy in China between values and technology, of how to incorporate the innovations of another culture into their own system. In the Qing Dynasty, during the latter part of the nineteenth century, scholar-officials tried to graft science, technology, and some limited forms of democracy onto the Confucian system of values and government. The "self-strengtheners" attempted to distinguish between "practical things" or "means" or "utility" (yong), like science and technology, and unwelcome "spiritual things" or "substance" or "essence" (ti), like culture and values. Their slogan was "Use Chinese learning for matters pertaining to spiritual essence, and use Western learning for matters pertaining to practical use" ("Zhongxue weiti, Xixue weiyong"). In 1986, the dilemma arose between borrowing Western "practical things" without contaminating the "spiritual things" signified by Deng's Four Cardinal Principles: the socialist road, the people's dictatorship, the Chinese Communist Party, and Marxism-Lennism-Mao Zedong Thought. Historically, ideology has always superseded pragmatism when a choice must be made between them.[12] But ideology in China often means whatever those in power choose it to mean. Most recently, Deng Ziaoping proclaimed in his essays that democracy is essential to China in meeting its economic and political destiny, but he observes a curious distinction between what he calls the "Great Democracy" or Western styled bourgeois liberalism and "Small Democracy" or appropriate forms of participation within a socialist state.

This dichotomy between values and technology, according to Ruth Hayhoe, is related to a persistent contradiction plaguing modernization efforts in China since 1911 in which Chinese political leaders were willing to transform knowledge patterns to serve economic development but unwilling to abandon the sacred principles of the political order as revealed by the Confucian tradition and more recently the Party's Four Cardinal Principles.[13] An inveterate contradiction has "existed between the need for an open, flexible knowledge system suited to economic modernization and the unwillingness to abandon traditional knowledge patterns supportive to an authoritarian political

regime."[14] Since 1977, Chinese leaders have faced the same dilemma of earlier periods. "They are determined to transform the higher curriculum to serve rapid economic modernization, yet they are ambivalent about the political implications of such a transformation of knowledge."[15]

Fragmentation and Monopoly of Power

China's higher education system of 1,075 institutions serving over two million students[16] is paradoxically centralized and fragmented. Policy making for both the full-time and alternative higher education sectors is highly centralized within four tiers of the central government in Beijing. At the apex is a core group of some 25-35 leaders who promulgate national policy, chiefly in the form of the Five-Year Plans. This elite group operates rather informally and secretly; it includes such figures as Deng Xiaoping, Li Peng, Jiang Zemin, other members of the Politburo, a small council of elders, and representatives of the People's Congress. Immediately below are various research centers and institutes linking the core group to the bureaucracy. Level three includes the State Council commissions and ministries which coordinate the activities of line agencies and provincial organizations. Level four consists of line agencies which administer policy.

To promote greater efficiency and control, the State Education Commission was created in 1985 under the CCP Central Committee's Reform of China's Educational Structure. The SEDC became a line agency under the State Council, co-equal in status with the State Planning and State Economic Commissions. Its chief responsibilities are to supervise the national education system. "It is responsible for the main policy of Chinese education and the planning of education. It serves to guide, organize, and to give coherence to the educational activities in local government and different departments; to arrange and to guide educational reform; to enhance the quality of labor; to educate all levels and all kinds of specialists in morality, intellectuality, physical education, and arts; to provide education and services for the socialist material civilization and the construction of spiritual civilization."[17] In its vast span of control, the SEDC administers the nation's basic education, higher education, vocational technical education, adult education, teacher education, minority education, and television and broadcast education. It has ultimate authority over admission standards, curriculum, degree examinations, teacher training, promotion of personnel,

salary regulations, training and selection of university administrators, capital construction, budgets, foreign academic exchanges, and national educational administration information, statistics, and data base management systems.

The first director of the SEDC was Li Peng, a career bureaucrat in the energy sector with no experience in education. By almost all accounts, Li was not a successful minister and the initial phase of the SEDC was marked by no discernible progress for higher education. The HES remains fragmented and poorly coordinated because one central agency, in the absence of intermediate agencies at the provincial and regional levels, cannot effectively direct the affairs of over a thousand institutions.

At the institutional level, the Chinese university contains a dual authority structure in the form of an executive and a political organization. In most universities, however, the Party cadres monopolize power and make all important decisions, although a blueprint was drawn by the SEDC, before the Spring massacre, to strengthen local autonomy and empower presidents to become the architects of modernization. In any case, the current governance system in China contains many characteristics that appear to impede modernization of higher education. Despite recent reform resolutions, the overly-centralized authority system tends to stifle local initiative and produce unwarranted interference into the operational affairs of individual institutions. Efforts by local authorities in the universities to improve educational development are often viewed as a challenge or threat to the traditional concept of national authority. Furthermore, the monopoly of power in the figure of the patriarchal leader has prevented the emergence of legitimate linkages between the power center and local institutions. At present, there are no viable intermediate or regional bodies to link the macro- and micro-governance levels. Thus, the perennial pattern of top-down decision making as opposed to building upward from a solid foundation threatens the effectiveness of current modernization efforts.

Institutional Freedom and Fang Lizhi

The handmaiden to academic freedom is, of course, institutional autonomy, and the pursuit of these two ideals has been the life's work of Fang Lizhi, China's Sakharov. It is Fang who has been the true leader and inspiration in the pro-democracy movement--the icon of intellectual freedom. His career as

the country's foremost astrophysicist and more recently university administrator is an incarnation of the freedom movement in China over the last ten years. It is his disciples, most heroically, Wuer Kaixi and Wang Dan, who stormed the barricades last spring and turned the octogenarian ancien regime on its heads, literally in the case of Li Peng whose name in Chinese characters was turned upside down by the marchers in Tiananmen Square in May to encourage his resignation, and made the visit of the world's most charismatic leader a sideshow to their spectacular at the square.

Fang's struggle has been predominantly to lift the oppressive weight of the authoritarian bureaucracy from the shoulders of China's universities and colleges and create a democratic system of governance--quite radical in many respects even by Western standards--to nurture scientific and intellectual creativity. More as Socrates at times than as Sakharov, Fang has lectured the Deng regime about the failure of the Chinese system to generate any Nobel prize winners in any field. How is it, the gadfly asks, that the Middle Kingdom, the venerable intellectual center of the universe, lags behind the likes of Japan and other small nations in this regard? Something must be wrong, he goads, with the system itself, its institutions, and the social environment.

In 1984, the Ministry of Education released its report, "The Reform of China's Educational Structure," which included several major changes for higher education, most notably the election of administrators to top positions by committees of academics rather than by appointment by the Party. Fang Lizhi, Vice President at the University of Science and Technology (known as Keda for short) in Hefei, Anhui province, and Guan Weiyan, its President, were appointed to lead an academic reform group for Keda. They developed and implemented a radical reform program which redistributed power within that university.

To reduce the concentration of power in the hands of top-level administrators, which allowed them to control research funds, awarding of degrees, and faculty promotion, power would be shared with special committees and academic departments. As Guan said later, "monopolization of power invariably leads to corruption. As soon as power comes into the hands of any one individual, it signifies a loss of democratic rights for the people."

Faculty and staff would have the right to audit all administrative meetings. Fang claimed the people had the right to know what their leaders were up to. This was of major importance to Fang because the Chinese political system lacked the provision for oversight and problems could intensify without

any outlet or opportunity for solution. As a result, violent struggle and upheaval might ensue.

The right of free speech of students and faculty was to be insured. They should be free from paralyzing forms of ideological repression. An open academic and political environment at Keda was needed, with anyone being able to distribute a handbill and hold an event on campus without securing prior approval.

In addition, Fang and Guan fostered many academic exchanges to open up Keda to the outside world. Fang said, "I am determined to create intellectual and academic freedom. This will be my top priority."[18] In the process, he transformed Keda into an academic paradise, one that even American academics might covet, with the university operating under a system of separate and balanced powers, a miniature model of the U.S. political system. Keda became the official model university of China.

Fang's role in the student movement is not limited to reforming Keda. In fact, he has contributed far more to the "Great Awakening" as an orator and chief spokesman before the government authorities. On November 4, 1985, for example, he gave a powerful speech at Beida in support of the students protest against the "second Japanese occupation of China" and encouraged political activism based on Western models. Even more importantly, he set forth the moral duties of the intellectual in the improvement of society, calling to mind the Confucian ideal of the scholar sacrificing his own safety on behalf of the rest of society. This ideal is recalled in the heroism of the student martyrs who stood their ground against the motorized Leviathan and gave their lives on behalf of their convictions.

It was Fang who rebuked the Vice-Mayor of Beijing for attending the scientific conference in New York at public expense, labelling his behavior an act of corruption. Corruption, said the Chinese Socrates, should be expunged at the top. Officials at the top must lead by example, reflecting yet another Confucian notion, and intellectuals should insist on ethical leadership from above.

To a packed gathering of students, he mocked Deng's Four Cardinal principles as disguises for "superstition, dictatorship, conservatism, and dependency." He proposed instead his own Four Principles: "science, democracy, creativity, and independence." They could well stand as the battle hymn of the student movement.

At another gathering at Tongji University in Shanghai on November 18, Fang spoke about the key element in the democratic agenda: human rights. These rights, like the right to think and be educated, are fundamental and universal. But in China these rights are considered dangerous and democratization "has come to mean something performed by superiors on inferiors--a serious misunderstanding of democracy." Fang then makes a bold distinction between true democracy which he had recently experienced in the U.S. and false democracy as practiced in China. In China, the government believes that only it can dispense rights and freedoms to the people, but in a true democracy, rights come from below, from the great mass of the people. "In a democratic nation, democracy flows from the individual, and the government has responsibilities toward him."[19] The remainder of the speech is an eloquent paean to academic democracy on campus. It is quoted in full because it explains the true nature of the 1989 pro-democracy movement:

> In many Western nations, universities are independent of the government. Indeed, management of a university system, its educational content, academic standards, and goals should be determined by academic, not political leadership. [Applause] Money, of course, is still a necessity, and for this a university needs the government's helping hand, but the government's responsibility should end there. . . . My point is that higher education can become an important democratizing force. To liberate oneself from the slavery of governmental and other nonintellectual authorities, one need only view knowledge as an independent organism. But this is not so in China. What our universities produce are tools, not educated men. [Applause] Our graduates cannot think for themselves. They are quite happy to be the docile instruments of someone else's purposes. China's intelligentsia has still not cleansed itself of this tendency. . . . Knowledge should be independent of power. It must never submit, for knowledge loses its value as soon as it bows to power. . . .
>
> Science should be allowed to develop according to its own principles, free of any ideological straitjacket. Marxist critiques of academic methods since Liberation have been utterly erroneous. . . . Democracy will have no protection until the entire scientific community is filled with this spirit. The products of scientific knowledge should be appraised by scientific standards. We should not be swayed by the winds of power. Only then can we modernize, and only then will we have real democracy.[20]

Fang's conviction that the university should spearhead the birth of true democracy in the society at large was echoed in the student demonstrators' petitions, the famous 12 Demands, submitted to the authorities in early May of

1989, which called for the right of free speech, assembly, petition, and referendum in the form of due process steps. On May 2, 1989, dozens of Beijing college students sent a petition to the Standing Committee of the National People's Congress, the State Council, and the Central Committee of the Chinese Communist Party. They listed 12 demands, but the spokesman of the State Council, Yuan Mu, rejected the "unreasonable" preconditions set forth in the petition. He did, however, indicate that the government was willing to continue dialogues with the students. In essence, the students called for equal status with the government representatives in the dialogue. Student representatives in the discussions would be chosen by the majority of the students, especially by those taking part in the "patriotic and democratic movement," and not appointed by the government sponsored student associations. Likewise, the students refused to recognize any student representatives "unilaterally and secretly invited by the government." The autonomous union of students of Beijing institutions would organize the delegation, with each university represented proportional to its overall numbers. The word "autonomous" was chosen carefully to signify the independent and democratic nature of the group.

The students demanded to be treated as equals in their proposed meetings with government representatives, who they insisted should be at least at the level of the Politburo Standing Committee or vice-chairman of the NPC Standing Committee or vice-premier of the State Council. Representatives of both sides should have equal opportunities to speak, with definite limits to the amount of time for questions and answers. Also, discussions should be open to both Chinese and foreign reporters and CCTV and Central People's Broadcasting Station should provide live coverage. The government spokesmen should answer all questions as completely as possible and resolve issues raised at the meetings. At the conclusion, agreements on issues raised should be signed by both sides to make it legally binding. Both sides should guarantee the physical and political safety of the representatives. Further, a specific time was set for a response to the petition, before 12 o'clock, May 3. Otherwise, the demonstration would continue. They proposed that the first meeting take place in the morning of May 4 at Beida.[21]

1989 SPRING UPRISING AND 1986 WINTER OF DISCONTENT

The crusade for academic freedom and intellectual liberties in 1989 had its roots firmly in earlier demonstrations of 1986 provoked by the oratory of Fang Lizhi. At a concert of the Jan and Dean band in Shanghai in late

November, 1986, members of the audience got up on the stage to dance. Afterwards, stadium security guards tried to arrest one of the dancers, a student from Jiaotong University, and he was beaten as he refused arrest. His fellow students protested strenuously to the authorities about the conduct of the guards which indicated that certain cadres had special privileges putting them above the law. Receiving no satisfaction, they appealed directly to the mayor of Shanghai, Jiang Zemin (now Party Secretary replacing Zhao Ziyang), who was a Jiaotong alumnus.

It was about this same time that word of the December 9th Hefei student demonstration, inspired by Fang's political activities, reached the Shanghai students, and big-character posters at Fudan, Tongji, and Jiaotong criticized the government for lack of progress in political reform, the quality of university living standards, boring curricula, excessive inflation, and the corruption of the bureaucracy with its back-door and guanxi practices. On December 18th, Mayor Jiang visited Jiaotong and was confronted by an overflow crowd of 3,000 students in the university auditorium. He refused to admit that the guards acted brutally at the concert and demanded that the students cease nailing posters and other activities "unfavorable to the political stability and unity" of the country. He was summarily booed off the campus.

Later in the day, students bolted through the locked gates and marched to the People's Square, the site of massive Maoist political gatherings, where they raised banners proclaiming the need for human rights, freedom for Wei Jingsheng (the Democracy Wall prisoner), and an end to dictatorship. The next day, students from the three universities paraded downtown and protested on the grounds of the City's Municipal People's Congress Standing Committee (Shanghai's legislative body) causing a massive traffic jam on the Bund. Police acted with reserve, reflecting order from on high not to provoke the students any further. At midnight, Jiang Zemin finally agreed to talk to them, siding with them about the need to hasten the process of democratization but chiding them for threatening order and stability.

The protests continued in the absence of any positive responses from the government and the students demanded that no reprisals be taken against the demonstrators, that the legality of the marches be recognized, that the students be given access to the media, that political reform be accelerated. Jiang agreed to the first two of the demands, but not the others. And he claimed that the protests were really being manipulated by a small band of

subversives. The demonstrations continued as students (supported by bystanders who spoke out against corruption and inflation) continued to listen to speeches decrying bureaucracy, obscurantism, and autocracy, and one student from the Huadong College of Political Science and Law offered to sacrifice his life in order to hasten the arrival of real democracy.

The authorities tried to restrict news of the uprisings to Hefei and Shanghai, but they failed to anticipate the "extraterritorial communications networks" like the BBC and VOA, not to mention the powerful Chinese grapevine (xiaodao xiaoxi) through which messages were transmitted by phone and mail to fellow students in other large cities.[22]

After Shanghai was literally shut down for four days, the authorities, in their obsession for maintaining order, issued proclamations condemning the protests as a threat to social unity and stability and claiming again that the protests were controlled by a small band of conspirators. The government also turned up the propaganda machine and paraded various officials denouncing the protests as equivalent to the mob rule of the Cultural Revolution and condemning "Western democracy" as "rich people's democracy, not poor people's democracy." Identical reactions were staged by the government in the aftermath of the Spring '89 Massacre with top-level officials distinguishing between democracy in theory and democracy in practice, and finding the latter as practiced in the West to be largely a plutocratic exploitation of the poor. The comments of one university administrator, Gu Chaohao, former President of Fudan University, in particular, reflected the perennial dichotomy between ti and yong: "All that we can learn from foreign countries is their advanced science, technology, and management."[23]

But just as the authorities were enacting their prohibitions against demonstrations, the protest subsided in Shanghai. Some students were disappointed that the moment had not been seized; as one dejected Jiaotong student lamented in his poster: "The masses have yet to awake. We walk forward alone, like orphans into a den of wolves. When we die, there will be no burial place for us."[24] How tragically prophetic!

The movement became "the spark that lit the prairie fire" (a favorite expression of Mao's) and the flame spread to virtually every large city in China. In Beijing, on December 23, 1986, students at Qinghua demanded a debate with the administration on the issue of democratization. Unsatisfied, they marched to People's University, chanting slogans of freedom. A few tried to

get to Tiananmen Square but they were blocked by the police. Still the government acted with restraint, using mild warnings in editorials to caution students not to undo past economic and social achievements of the Deng regime and not to expect complete reform to occur overnight. But by December 26, at the insistence of Deng who apparently sought to preserve the delicate balance of power in his power circle, the authorities decided to crack down by prohibiting demonstrations without prior permit and forbidding demonstrations at such strategic places as the square and the Party leadership compound (Zhongnanhai). Earlier wall posters had been outlawed as evocative of the tactics used by the Red Guard during the Cultural Revolution and if any appeared on the campuses they were ripped down by the Party cadres; and students were unable to communicate their views.

The students and intellectuals now were attacked in official proclamations as "counter-revolutionaries"--a grim reminder of the tactics used by the Red Guard in using such labels to ostracize and persecute. They also accused the student movement of being infiltrated by Taiwan agents, an extremely serious condemnation.

On December 29, Beijing Normal (Shida) students ignored the ban on protests and took to the streets to vent ostensibly their opposition to university authorities who tore down their wall posters and banners. With brooms as torches and cotton banners demanding freedom, they marched to People's University (Renda) and Beida and announced their four demands: an end to the new rules banning demonstration, the right to distribute the magazine Chinese Intellectual (edited in New York by the expatriate Liang Heng), the right to establish an association to promote democracy, and an end to one-party dictatorship.[25]

A hard line reaction was issued by the government on December 31 rebuking those who had a false sense of democracy, and two "instigators" were arrested. On January 1, the students marched to the Square and a few hundred finally broke through the police cordon as about 25 were arrested. Back at Beida, the students next presented the President of Beida, Ding Shisun, with a list of demands including: the release and amnesty for those arrested, a no-reprisal guarantee, and media access. The students threatened to boycott classes if their demands were not met. Ding met with the Beijing Mayor, Chen Xitong, and announced that the detained Beida students would be released. But when they learned that the non-Beida students were still being held, the students took to

the Square again, and only the promises of Beida Vice-President Sha Jianxun that all detainees would be released persuaded them to leave. The government's restraint throughout the '86 demonstrations was remarkable, given its awesome potential for smothering the movement entirely. Schell sees this an indication of the leaders dependence on the support of the intellectuals for the reform program.[36]

Suddenly, the protests ended, as students concentrated on the nationwide examinations, and the only remnants of their momentous uprising were the shreds of big-character posters fluttering on the walls at Beida.

The '86 uprising was notable for several reasons. It was the largest mass movement since the Cultural Revolution; the government exercised unprecedented restraint, suggesting perhaps a division among the leadership on how to react; it was remarkably spontaneous and ad hoc. "It sprang up more from a general spirit of impatience and irreverence than from any coherent body of thought. There was a vagueness about the students' understanding of democracy that gave the movement a curious air of insubstantiality, even at the height of the crisis. The movement had little structure, published no underground newspapers or journals, indulged in little serious political or philosophical dialogue, and to the end, remained virtually leaderless. In addition, with the exception of Fang Lizhi's speeches, this momentous upheaval left surprsingly little in the way of a corpus of ideas. If left no martyrs, not even a rallying cry for an imprisoned dissident like Wei Jingsheng. Unlike the participants in the Democracy Wall Movement, which included many older, more sophisticated protesters who had cut their political teeth on the ideological struggles of the Cultural Revolution, the students of 1986 were younger, less formed intellectually, and surprisingly naive about both the intricacies of Chinese Party politics and the complexities of constitutional democracy and human rights theory."[37] Schell finds that the '86 demonstrations were a "great exploration." They did not accomplish much practically or ideologically and did little but impede reform, rather than hasten it. But the demonstrations did go to show the power that even small numbers of students could wield as they filled a spiritual and political vacuum. They were the prologue for the tragically violent student movements to follow.

CONCLUSION

Higher Education Reform Efforts and the Chinese Culture of Authority

An important measure of a society's successful modernization and political development is its capacity to create and maintain complex organizations which are responsive to new technologies and adaptive to change. The presence of such organizations distinguishes an age of technology from industrial and pre-industrial ones. In its long march toward modernization, China has shown marked resistance to decentralizing authority, reflecting a traditional fear that the nation's unity and order will be compromised by the creation of autonomous power groups. In other words, as Lucian Pye explains, there is a deeply ingrained distrust of pluralism.[38] A propensity for centralization and monopoly of power by a coterie of elders is a pronounced characteristic of Chinese institutions. The yawning gap between rhetoric and reality may be an instance of a fundamental paradox in Chinese politics. According to Lucian Pye, "the Chinese have a great need for ideology, yet in practice they seem to ignore the content of ideology; they do what advances their self-interest without amending the substance of their ideology. They can profess. . . a dedication to 'socialism' and even to international communism, while acting in ways totally inconsistent with what Westerners consider to be true socialism. Doctrine thus becomes both a way of masking one's feelings of aggression and a means of confusing opponents about one's motives."[39] Much of the HES reform resolutions reflect this doctrinal dissimulation and the failure to translate doctrine into reality engendered mistrust and rebellion among university constituents.

Attempts at reforming China's centralized but fragmented Higher Education Sector have encountered obstacles, the most intractable being those ingrained in China's traditions of authority and power, as explained by Lucian Pye. (1) Traditionally, the Chinese view legitimacy as the monopoly of the supreme authority which is only loosely accountable to society. Modernization is greatly impeded by this predilection for centralized power in the form of a patriarchy and instincts toward moralistic conformity, particularly when the leadership senses any threats to its line of thinking. For all of his rhetoric about decentralization as part of economic and academic reform, Deng Xiaoping is wedded to the monopoly of power at the top. He seems unwilling or unable to accept divisions of authority and accountability. (2) Chinese attitudes toward government are predicated on the notion that it should be carried out by the

rule of men, not by law; strong personal leadership is essential, and subordinates must unquestionably demonstrate their loyalty to their superiors. The insistence on loyalty inhibits imagination and stifles creativity. At the same time, factionalism is highly distrusted, resulting in immense impediments to competition and exploring alternatives. Perhaps, even more disastrous, the Chinese social order is predicated on family lineages and connections (the guanxi system) which leads not only to anti-rational attitudes but also to corruption and scandalous favoritism. (3) Correspondingly, there is a gray area beyond the domain of formal authority in which power is exercised informally and even secretly. In the political system, the informal rules of the power system are not codified. This makes it difficult to institutionalize authority since the Chinese are reluctant to invest power in impersonal arrangements. This explains at least in part why the student demonstrators in 1989 verbally attacked Deng Xiaoping and Li Peng directly. (4) The Chinese faith in benign forces which are beyond the immediate command of any actor is reflected in the somewhat passive pursuit of modernization. Modernization is viewed as an external (Western) force that will inevitably take place, as part of a somewhat mystical belief in inexorability of the cycles of change.
(5) The Chinese display a curious ideological paradox: They have a great need for ideology (see Deng's sacred attention to the "Four Cardinal Principles" for just one post-Mao illustration) but in practice they will often ignore the content of the ideology and do whatever advances their self-interest without amending the substance of their ideology. This creates a gap between thought and action, between words and deeds. Deng's regime more than occasionally genuflects on one leg to "modernization" while kneeling on the other to political repression. Ideology becomes largely a matter of whatever the supreme ruler says it should be. (6) The Chinese lack a tradition of using power to systematically accomplish policy objectives. Instead, they view power as something formalistic and not as an instrument for forwarding utilitarian ends. This causes the bureaucracy to be functionally ineffective.
(7) Attempts at modernization must contend with the legacy of administrative "reforms" that have been largely matters of organizational reshuffling, the net result of which has been to actually weaken the communication flow between separate hierarchies, which in the present case of higher education would refer to the SEDC, the State council, and the myriad ministries charged with governing the HES.[30] (8) A dominant need for social order and unity often prevents leaders like Deng and Li to stifle criticisms and suppress diversity of opinion.

1989 Student Movement as "Second Cultural Revolution"

In suppressing the Spring Student Movement, Deng Xiaoping claimed that he was cracking down on a second Cultural Revolution. Roderick McFarquhar quotes Deng as telling Party leaders in late April that "This is not an ordinary student movement. It is turmoil. . . . What they are doing is altogether the same stuff as what the rebels did during the Cultural Revolution. All they want is to create chaos under the heavens."[31] But the two movements were drastically different, and in fact, as McFarquhar explains, the 1989 uprising was the mirror opposite of the 1966 upheaval. The 1989 protest had the atmosphere of Woodstock, whereas the Red Guard demonstrations were redolent of Nazi spectacles at Nurenberg. Compared to the spectacle contrived by Mao, the recent demonstrations emerged spontaneously and naturally from the people, despite the fact that they were well organized by student leaders. Too, the anthems of the two movements were remarkably different. The Red Guards marched for proletarian egalitarianism, and the student activists for freedom and democracy, as personified by the goddess of democracy. Unlike the militant cultural revolutionaries who sought to punish and expunge "capitalist roaders," those marking the 70th anniversary of the May 4th Movement sought the resignations of the nation's leaders and practiced pacifism and non-violent demonstrations against armed troops.

But there is one important connection between 1966 and 1989: Mao admonished the young people to "dare to think, dare to speak, dare to act. . ." Rebellion was justified and this message was not lost on subsequent "revolutionaries" as the relations between the state and the students had been radically redefined. Thus, it was that in 1976 near the end of the Cultural Revolution that students dared to commemorate the death of Zhou Enlai with a mass mourning at Tiananmen Square and protest against the Gang of Four, resulting, ironically, in the installing of Deng as the new leader. Seen in this way, Deng's assumption of the Premiership was prompted by revolutionaries, not "counter-revolutionaries."

Two years later, Deng was again the beneficiary of mass demonstrations in the form of the Democracy Wall movement which helped him assert his power over the remaining Maoist hardliners. But, as harbinger of 1989, Deng suppressed the movement and arrested one of its most outspoken leaders, Wei Jingsheng, who

is still in prison. Deng's crackdown of the 1978 Democracy Wall movement also reveals his propensity to choose power over democracy when a choice must be made.

But the Chinese authorities will not be able so easily to erase the spirit and influence of the spring uprising of 1989 as they were the last few scraps of paper from the big-character posters on the campus bulletin boards or the bloodstains along Changan Avenue. Just as May 4 transformed the literary and political landscape, and 1966 altered the social contract between authorities and the governed, June 4 '89 will mark the great cultural and academic divide between the Old and the New China, between the Yellow River and the Pacific Ocean, between the stale propaganda of Deng Xiaoping and the daring dreams of Fang Lizhi and Wuer Kaixi.

To those who were there during those seven weeks that shook the world, the Movement might be symbolized by the enormous tree trunk that the demonstrators had unearthed from the ground and used as a speaking platform in the middle of a huge intersection in front of the Lido Hotel, near the Beijing airport. The protesters tore up the roots of the ancien regime and the seeds of the New China will be sewn in the blood of their sacrifice.

Footnotes

[1] Peter R. Moody, Jr., "The Political Culture of Chinese Students and Intellectuals," Asian Survey, Vol. XXVIII, No. 11 (November 1988), p. 1147.

[2] He Shang, a six-part film for television by Xia Jun, Su Xiaokang (director), and Wang Luxiang. See New York Review of Books review by Frederick Wakeman, Jr., on River Dirge, Vol. XXXVI, No. 3 (March 2, 1989), pp. 19-21.

[3] China Daily, June 28, 1989, p. 3.

[4] As quoted by Fred Shapiro, "Letter from Beijing," New Yorker, June 5, 1989, p. 74.

[5] "Educational Reform is Urgently Needed," reprinted in China Daily, May 1, 1989, p. 4.

[6] Based on article by Maisie Pearson, "Students' Demands a Reflection of Their Ordered Existence," Hongkong Sunday Standard, June 11, 1989, p. 4.

[7] "Students Quit for Money and Travel," China Daily, November 26, 1988, p. 3.

[8] "Exodus of Young College Teachers in Beijing," China Daily, May 4, 1989, p. 4.

[9] People's Daily, May 1986, as quoted in Orville Schell, Discos and Democracy, (New York: Pantheon Books, 1988), p. 32.

10 Schell, Discos and Democracy, p. 32.

11 Schell, Discos and Democracy, p. 33.

12 Based on Schell, Discos and Democracy, p. 34. See also Lucian Pye, Asian Power and Politics (Cambridge, Mass., and London: Belknap Press of Harvard University Press, 1985), pp. 51-52.

13 Based on Ruth E.S. Hayhoe, "China's Higher Curricula Reform in Historical Perspective," China Quarterly, June 1987, p. 197.

14 Hayhoe, p. 205.

15 Hayhoe, p. 220.

16 Reliable statistics are simply unavailable in China, so these current figures are estimates based on totals reported in various reports. Less current but perhaps more accurate statistics were reported in 1986 by the State Statistical Bureau, Statistical Yearbook of China, Hong Kong: Economic Information Agency, pp. 623-33. These data show 1,016 institutions of higher education, of which 388 offer graduate programs for 87,331 students; 344,000 teachers for 1,703,000 students.

17 The Announcement of The Responsibility and Organizational Structure of the State Education Commission, March 22, 1989. Internal SEDC document.

18 Schell, Discos and Democracy, pp. 128-130.

19 Schell, Discos and Democracy, pp. 218-220.

20 Schell, Discos and Democracy, pp. 220-221. My italics.

21 China Daily, May 5, 1989, p. 4.

22 Schell, Discos and Democracy, p. 228.

23 Schell, Discos and Democracy, p. 230.

24 Schell, Discos and Democracy, p. 230.

25 Schell, Discos and Democracy, p. 236.

26 Schell, Discos and Democracy, p. 240.

27 Schell, Discos and Democracy, p. 242.

28 Pye, Asian Power and Politics, p. 189.

29 Pye, Asian Power and Politics, p. 206.

30 Pye, Asian Power and Politics, p. 213.

31 "The End of the Chinese Revolution," New York Review of Books, July 20, 1989, p. 8.

THE TASK OF MODERNIZING CHINA:
NECESSARY CHANGES IN HER EDUCATIONAL IDEOLOGY

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Introductory Remarks[1]

China is struggling to reach Western standards of well-being and one very important strategy for accomplishing this is the improvement of manpower to enable people to cope with the challenges of industrialization and with the competition in a world-wide interconnected economy.

On the educational level, China tries to cope with these challenges by letting people learn only the "bare facts" of Western knowledge and by trying to keep the "Western" mind outside. In order to maintain China's cultural, i.e., socialist, identity her leaders insist on the preservation of the "revolutionary" values and on those specific Chinese values which are seen as the foundation of China's culture. This insistence is accompanied from time to time by "campaigns" against Western, Bourgeois or Liberal thoughts or pollution which are regularly combined with the allegation of fostering and spreading pornography.

The contemporary Chinese educational system today, which some Western writers call the "academic" system as to distinguish it from the "revolutionary" system favoured during the "Cultural Revolution,"[2] "the turbulent 10 years," is aiming at elite education and is providing only a very small amount of qualified mass education and this is valid for both the professional and the academic education.

Although this is a policy pursued not only in China, it has an especially great affinity to China's cultural tradition. But it does neither serve the actual needs of her economy which is under pressure to modernize nor the needs of the people. It is a policy based on century-old principles helping the small ruling class today - the Nomenklatura - to maintain its position. But its interest cannot be identical with the interest of the common people.

In this essay it will be outlined as follows:

(a) on which principles the European development is based and how they differ from the Chinese system,

(b) how these principles determine the educational ideologies,

(c) where the principles of Chinese education come from and

(d) which consequences they have on the structure of the system, and

(e) which threats both the principles and the system face today and how both must be changed to survive. This will only be at the theoretical level. (In fact, I don't know how to get the real system changed in face of all the obstacles existing.)

I am definitely convinced that China's contemporary educational policy must lead to failure if one measures it on the aim of modernization. Some of the reasons for this prediction are discussed in some detail.

In very general terms this failure is caused by a false interpretation of the relation between the structure of a society and its guiding values. A society destined to become industrialized and thus undergoing rapid technological and social changes cannot keep the values of a more or less stagnant society based on an agrarian mode of production. As Karl Marx already pointed out, the discrepancies between the society's ideology and the productive forces can become too strong to cope with and thus will cause extreme and recurrent social tensions.

The Social Impact of Industrialization

It is taken for granted that the changes enforced by the industrialization of the whole world economy are the most fundamental changes for the human lifestyles since the transition from hunting and gathering to agriculture. All those cultural differences and varieties which we have become used to equate with the concept of national or cultural identity will become meaningless in view of the impact the new mode of production exerts on the societies. This says we are undergoing a fundamental revolution of human lifestyles which will make obsolete all the venerable old rules of explaining the world and which rule social life because they belong to a period passing away.

To adapt to the industrial mode of production implies the necessity of working out new cultural ideas and forms to cope with the task of organizing social life and give the single human being a sense of living. These emerging

new cultural forms will have a specific essence in common all over the world the same way they had during the period of agriculture but it will also leave much room for cultural - still "national?" - variation.

The changes to come can be looked upon as structurally similar to those which took place some thousand years ago when many tribes were forced to settle[3] and, consequently, generated new cultural and social forms - e.g., social stratification, political authority, organized religion, warfare, economic exploitation - which correlated higher between different groups with the same (similar) mode of production than with the preceding cultural form of the same group while still being hunter-gatherers. All the little changes amounted to a revolutionary change and the development of modern industrial societies must be seen as a similarly radical, although faster, process which is still going on.

Because of the unavoidable competition between different social entities in situations of close contact, an active adaptation to the new developments is inevitable, otherwise the social entity (nation) will pass away.

Industrialization as the Result of a Specific Culture

One crucial problem of such adaptational processes is the fact that the new development starts from specific cultural sources and therefore, at least in the beginning, it will be identified very often as a threat to the indigenous culture, a feeling which is expressed as in the term "Cultural Imperialism." Thus, the "backward" cultures will build up a resistance against the alien cultural influences which, I think, does more harm than good to the people because it prolongs the necessary adaptational process and uses both mental and physical energies not for productive but for control purposes.

Industrialization is of European origin and there is a wide range of explanations why Europe - and its colonies in North America - once took the lead in the economic, technological and scientific development. Some of them are simply wrong, some owe their existence more to political expediency than to scientific dedication, others are incomplete, ignoring or overlooking important features of the European development.[4] A very popular way to getting a mixed metaphor in both social-scientific and everyday life theories about the differences between Europe and the rest of the world is to apply a crude

Marxist development scheme to non-European countries, something the Chinese also like to do.[8]

This distortion of a theory has led many people, mainly in the "developing countries," to the conviction that there is something like a quasi-natural development from pre-industrial modes of production to industrialized modes of production. To be more precise, the main fault underlying many developmental strategies is the assumption of a "natural" and, therefore, necessary and inevitable development of mankind's modes of production from energy-converting to fuel-consuming machines.

This assumption is completely wrong and it is necessary to understand that modern industry is nothing quasi-natural, occurring anyhow, sooner or later, in the human historical development but is an invention of the Western European culture, based on some very special social and philosophical conditions of the European system.

This insight leads to the conclusion that it cannot be sufficient to accept modern industry as a tool which "automatically" comes to us in the course of man's natural history but to understand that in the process of conversion many cultural traits have to be adapted in order to guarantee the success of this conversion process.

For a social scientist, this diagnosis implies a very rigid and thorough analysis of each cultural system in question to find out which parts of this culture have to be changed and how they can be changed. This is what I will try to accomplish in the following text for the Chinese culture, although there is not enough space to go into all the subtle details. Therefore, this analysis can be called an intellectual woodcut.

Specific Features of the European Culture Leading to Modern Thinking as a Condition of Industrialization

It is not possible to prove the following assumptions experimentally. But strong evidence can be won by differential social analyses that one of the decisive reasons for the special European development lies in the concept of competition guiding economic, political, military, religious and last but not least, cultural and scientific affairs.

Although it is not possible to display in detail the evidence for this argument, it is beyond any doubt that competition in the cultural fields of religion, philosophy, arts and sciences, etc., have fostered the emergence of the Enlightment and thus the very specific kind of European rationality. This kind of European rationality has lead to the "disenchantment of the world" (Entzauberung der Welt, Max Weber), one key fundament of modern thinking. Therefore, it is also responsible for the emergence of modern industry and technology, which shaped the material side of the so-called developed modern world; this is true for both capitalist and socialist societies.

Although modern European rationality is a formal principle and not an ideology with a specific moral content or specific ethics, it has two essentials:

(a) The conviction that all mysteries and secrets of the world and the universe can be explained by systematic research and

(b) No supernatural "explanation" will be accepted in the field of research. There is no room, for example, for the traditional Chinese "innerweltliche Magie" as Max Weber called it.

Despite the fact that this kind of rationality[6] has only very limited moral content, the ethical and social consequences are important and far reaching.[7] One of them is the fact that in Europe there is no longer any holy, sacred or socially determined knowledge but only knowledge which is, in principle, commonly accessible. Because there is nobody who can claim to know the ultimate truth, all people are obliged to draw on the body of knowledge and to contribute to it by intellectual competition according to their individual ability. The West legitimated the ideological pluralism and nowadays we look upon it as a human right. Connected with this attitude is the skepticism against the human ability of objective cognition and this gave rise to modern epistemology. In fact, one can argue that competition is the social version of the scientific method of "trial and error."

The process of European modernization has brought about radical changes within the European societies and Europe as a whole. The Europe of the late 20th century has only very little in common with the Europe of the late 17th, 18th or early 19th century. A European from the times of the chilvary or the religious reformation coming back these days would hardly be able to understand modern Europe[8]. These changes prove that what might be called the

European identity - or the English, French, German, Italian, etc., identity - has changed continuously within the last centuries and it has also changed very much even since 1945.

If one does not believe that the answer lies in the specific nature of the Europeans, it is necessary to find the social causes for this development which took place in Europe and only in Europe.

Most of the answers given by recent historians, anthropologists or sociologists point in the same direction: it is the scattering of Europe into a multiplicity of political centers since the fall of the western part of the Roman Empire.[9] This variety caused the emergence of manyfold political loyalties and differing ways of life. One consequence of this situation was the development of differing ideologies.

I don't want to sketch the European history right now but it is necessary to understand that the great number of politically independent actors in Europe had two importance consequences:[10] Europe has been involved in an endless series of wars interrupted by some periods of peace. Therefore, no sovereign could feel sure to keep his territory because of the many possible enemies who were more or less equally powerful. That made it necessary to focus much attention on military defence and as a consequence on keeping the populace actively loyal. If the population were reluctant in supporting the sovereign he would not stay in power for long. Thus, no European sovereign could afford to turn his attention more or less completely to suppressing and exploiting his subjects because he needed everyone of them. Moreover, each political leader needed military personnel and money and he had to attract it. Additionally, for their political survival, the sovereigns needed, at least, a small technological, organizational, etc., advantage over actual or potential rivals. These circumstances either prevented the emergence of strong hierarchical orders or weakened them where they already existed. This kind of social organization prevailing in most other areas of the world turned out to be less viable under European conditions.

War was part of the normal life of European men. But, as W. McNeill (1982) has shown, this military situation, however uncomfortable it was for the contemporaries, was one key foundation for the development of the civil rights. In the unstable and unsecure social, political and military environment where the Europeans learned to live with manifold loyalties, it caused the separation

of spiritual from political leadership and taught Europe the concept of the balance of power. It became more or less a political ideal not only in foreign, but what is more important, in internal affairs as a mean for the limitation of power, which is thought to be a guarantee for individual liberty (as already Montesquieu, in his "L'Esprit des Lois," has stressed), a concept alien to most non-European political systems.

In Europe, no political power (nation) turned out to be superior and single. Also, in the religious fights, no party was able to establish itself as an unrivalled holder of the true faith. The uninterrupted wars and fights became a deadly threat for the single actors as well as the whole system and, therefore, the Europeans were forced to develop methods to cope with this unpleasant situation. Here are the roots of the concept of tolerance, the acceptance of the individual as an independent source of knowledge and of a political will, the ritualization of competition to reduce its social dangers, etc. That these concepts turned out to be an even materially superior device compared with all other systems nobody could anticipate. It's my definite conviction that the development of modern European thinking is the response to a potentially lethal challenge special in the European situation.

Thus, because for structural reasons Europe could not get rid of the permanent competition, the only chance for her was to defuse this dangerous situation by accepting the fights in principle but, at the same time, to establish rules which helped to ease the tensions and, therefore, reduce the amount of force. One "remedy" to reduce the temperature of religious struggles and wars was:

(a) to accept that each individual has the right to stick to its own belief and

(b) that there is no single truth but a variety of "truths".

In principle the game is still the same but it lost it's vital danger for the system, though not in any case for the single actor (nation). In fact the solution turned out to be very beneficial for the whole system for quite a long time. Europe developed a concept of rules how, in principle, equal social entities and even individuals can deal with one another: a scheme for horizontal social relations.[11] The organization of markets is one example, the university is another one.

Europe did not only organize political competition but as an important cultural feature also developed intellectual and spiritual competition. If one cannot use force there's a need for an objective standard which helps to decide who is the winner. For that reason, one needs an impartial law and in science the rules of logic and a scientific moral. Because the system will be overburdened if it has to control everybody in that system of independent individuals, the responsibility for supporting the moral has been put into the individual conscience. The individual is responsible for keeping the rules which implies that he has responsibility for the whole community. It is, therefore, an independent political entity.

We have this outcome because Marx's statement is correct, although not very precise: "Es ist nicht das Bewubtsein der Menschen, das ihr Sein, sodern umgekehrt ihr gesellschaftliches Sein, das ihr Bewußtsein bestimmt."[12]
My thesis is: Europe developed its highly competitive culture as a response to an otherwise deadly threat and not because of special spiritual qualities. It is the unique answer to historically unique circumstances.

This result allows us to conclude that in a world of growing political and economic interdependence and a multiplicity of political and spiritual centers, the European approach of coping with the dangers implicit in such a situation may serve as a guideline. This does not mean that it should be an identical way because the situation today is materially different.

The Chinese Experience

If it is possible to trace back the emergence of the European political organization and its way of intellectual and political problem-solving to unique circumstances, then it must also be possible to explain the Chinese social organization and intellectual or religious customs by China's completely different historical or developmental experiences.[13]

China has always been striving for getting or keeping the stately unity of the whole area which was defined as China proper. Any variety of political centers has always been looked upon as a threat to China because it implies, for Chinese understanding, inevitably: chaos.

The Chinese Social Order

China formed, for several reasons,[14] very early in her history a highly differentiated social organization which has its political and spiritual center in the Emperor: The Son of Heaven.

The complete system procures its legitimation only from this center and from nowhere else and the holder of the title earned it because he kept it as long as he was able to guarantee a stable order - as long as he was able "to keep the mandate of heaven."

Not only the political but also the social system became extremely centralized. In fact, in China there is no difference between the political and the social system because China did neither develop a concept of social nor of state organization based on more or less independent social/political entities which are self-reliant and self-responsible and which have the right to interact without asking the center. That's the reason why never a multiform society emerged with different centers and loyalties (e.g., religious, political, military or professional) and, therefore, differentiated by polymorphic horizontal and vertical loyalties. Only overwhelmingly powerful vertical relations with only a vertical loyalty developed. There did not exist any independent source of power outside the strictly vertical political order.

The center of all was the Emperor who delegated power and competence and all political measures were taken in his name. Of course, he did not owe the legitimacy and legality of his position to the approval of the citizens but only from his ability to keep the right order, an order which was not given to his deliberate will but which could be maintained by following correctly the traditional rules.

Thus, we can say that in China there never emerged a combination of vertical and horizontal relations; only vertical relations are understood as legitimate. But vertical orders only know rulers and subjects. This order must be equated with a strong hierarchy and social problems are principally defined as unclear hierarchical relations which confuse the areas of responsibility.

Horizontal relations - relations between principally equals - are either thought to be brought about and thus regulated by hierarchical orders or they should not take place. Horizontal relations always imply the threat of chaos

for the Chinese and, therefore, they always try to change horizontal into vertical relations which they are accustomed to handle.

Because there is only one political and ideological center, it will also be decided there what is right or wrong. And right is what maintains or strengthens the order.

The Role of the Individual[18]

The headline is somewhat misleading because actually China never knew any individualism and did not know the citizen as the political manifestation of individualism. All legitimate social influence originated on the position within the political (social) hierarchy and, therefore, the only way of legitimate social ascendance was joining the imperial officialdom. Another consequence was that there never happened in China a separation between the political and the religious (spiritual) sphere.

China is a country so strongly impregnated with Confucianism that even today in many cases it is rarely possible to separate Communist from Confucian influences. But when in doubt it is a Confucian tradition.

The individual defines himself socially only as a part of the ubiquitous hierarchy and this means in a relation of super- or subordination. Everybody in China has a superior, except the emperor - or Mao Dzedong.

The position within the hierarchy defines the duties of everybody and the right way of fulfilling them. Discretionary powers depend on the traditional rules and the individual is only allowed to act in accordance with them and he is expected to apply them to specific situations. Because the commitment to the rules is valid for all levels of the hierarchy, one must not equate this system with tyranny or arbitrary power of the superiors - although it is susceptible to it.

But everybody who sticks to the rules and acts correctly has the right to criticize other people who do not, even his superiors. On the contrary, if the individual did not act correctly, he is obliged to self-criticism which shall help him to understand where the rules have not been followed, e.g., because of insufficient understanding or because of seduction by the morally unhealthy influences (nowadays very often: the bourgeois decadence).

The right or correct way of life realizes itself by correct application of the rules, not by thinking the correct ideas or by the responsibility of a self-responsible individual against an impersonal God. Individual religiousness manifests itself in correct behaviour towards the superiors, e.g., paying the due respect to the father according to the traditional rules and not by individual responsibility for their own salvation.

Because the right actions are equalled with the right spirit, the Chinese society does not know the separation of being and what ought to be done. Everybody who has acted correctly has not only the right but the duty to educate those who do not live up to the standard. Therefore, China has always been a pedagogic society where people are encouraged to educate each other. (Lindblom coined the term "Preceptoral Society" for Mao's China, which describes about the same fact.)

Confucianism has become the religion of the state in the sense of a basic ideology, but it never became a state-religion like Catholicism in medieval Europe.

Conflicts Within the Chinese Society

I think everybody who has been in China will have noticed that Chinese always try to avoid open conflicts. In all the years I cannot remember one situation where Chinese overtly disagreed. They always try to disguise their refusal by a phrase like "We will think it over."

This aversion to conflict is the result of the strong hierarchical structuring of the society and the one-dimensionality of ethics and politics. The order of heaven is pouring down via the order of the society to the order of the heart and the disturbance of this order will have its repercussions on the order of heaven. Because it is impossible that conflicts will arise if all people on all levels of the hierarchy are acting right, a conflict can only emerge if somebody is making mistakes. If this is true it implies that in case of disagreement one party is not in harmony with the rules, which for a Chinese is the most important thing to be. Thus, if one openly opposes a counterpart, this is evidence that one thinks the counterpart is doing wrong by not following the rules. A person tries to keep the harmony because otherwise he will "lose face" which really means he will endanger his position within the social hierarchy.[14]

If all holders of their positions on the different levels of the hierarchy will act in accordance to the rules and, therefore, maintain the order of the heaven, there will be no social conflict. If a conflict arises, this is the fault of members of the hierarchy who do or did wrong. Thus, the concept of class-struggle which belongs to the icons of Marxism-Leninism and also Maoism is a basically alien concept for Chinese thinking. Thus, one can easily understand why the concepts of class-enemy and class-struggle usually are used in moral categories and more or less stripped of their analytical content: the class-enemies are those who offended "the rules of heaven" and class-struggle is a campaign for educating people. (To kill some thousand people only means to show the reluctant how perfectly earnest the call for betterment is meant.)

Education, Humanities and Sciences in China

One can distinguish different modes of keeping, distributing and handing down knowledge. One is to keep it strictly under the control of a very small group - most often priests - and keep the access to this "caste of knowing men" barred by very difficult examinations of various kinds. Their successful passing means participation in the relevant political power.

The Chinese system of recruiting the officials of all ranks by rigid examinations is one example for that.[17] Therefore, learning has always been esteemed very high in China and the well educated and civilized man has been the social ideal for a very long time, since education was the only legitimate way ". . . by which one could reach a position of power, influence and wealth. . . . Education was a worth of admission ticket. . . . What marks it out as specially important to the understanding of China is that, for one thing, China's civilian bureaucratic style of government put a premium on scholarship as a qualification for office rather than on birth, and for another, despite the veneration in which scholarship was held, education was in fact not at a very high level among the population at large. . . . Good education was, therefore, specially rare and specially precious for what it led to."[18] Towards the end of the 19th century the numerical relation of candidates examined and examinations passed was something between 1% and 4%.[19]

In social systems which use the acquisition of knowledge mainly for the selection of its leading personnel, religious or nonreligious, the acquisition and the use of knowledge are highly ritualized. And this implies that the traditional knowledge must not be changed because only the correct repetition of a transmitted text or the exact application of a transmitted formula are preconditions for getting "right" results. Consequently, a change cannot result in any good. Even an attempt to change the existing codification of knowledge is looked upon as an offence or even a sin. Consequently, the normal accumulation of knowledge in such a system is very slow, actually it is so slow that it does not seem to change during a man's lifetime.

The canon of knowledge tested in the examinations belonged, in Western categories, exclusively to the humanities and trained the candidates also in the acquisition and internalization of specific moral contents. Learning does not mean to convey cognitive contents only but also to put across the ideological and attitudinal aspects of the cognition.

It would be a mistake to think that the examinations could be passed by memorizing only. The main objective was to let the candidate show that he was able to find his very own solution (interpretation) within the fame of the formal rules. Only the complete mastery of both the content and the spirit of the rules enabled a candidate to pass the examinations and reach the highest position.

It was not the man with the best functional knowledge who would be the best official - as in Europe - but the man with the best understanding of the principles of the rules. Only this knowledge enabled him to live up to the demand to keep the order of the heart in accordance with that of the state and that of the heaven.

This mode of thinking, postulating a unity of <u>being</u> and <u>what ought to be done</u>, is the reason for an experience many Europeans made in discussions with Chinese colleagues. The Chinese think that there is one and only one solution for a problem and they want to understand the underlying principle. That is, if you understand the principle and act in accordance with it, you cannot fail. Therefore, there must be a best and only one way to build an economy and if this way fails it is because either the circumstances have not been analyzed correctly or the actions have not been in accordance with the principles.[10] This is the cause for the Chinese preference for masterplans in social and

economic affairs.[31] If it does not work, there will be always one who can be blamed.

Preliminary Conclusions

Although the ideas presented above may seem to be far removed from the topic of China's educational ideology, they are necessary to understand the reasoning, because only an understanding of the fundamental cultural differences between China and the West will allow to develop adequate educational strategies enabling China to cope with the Western challenge. This is even more important in view of the fact that until now all Chinese attempts to master it have failed. The ongoing social and political convulsions indicate clearly that Chinese communism does not have the solution for the problems at hand.

Therefore, no advice on structural changes can be given here, it is only the basic cultural differences and their consequences which are dealt with. It should go without saying that speaking about the differences and to make clear why they developed has nothing to do with evaluating the two cultural approaches on a moral level and it has nothing to do with good or bad. If it may seem that the European culture is valued higher, I want to stress here that, for example, the psychological costs for individual adjustment to permanently changing environments are very high in terms of neuroses, crime, anxiety, etc. Life in a traditional Chinese society has not been burdened with these costs.

But because the European-born world economy and industrial system is in a dominant position, China must actively react and one decisive element of this reaction is education. It is the key for systematically making men fit for this challenge. Therefore, China has to pay much attention to this sector because this is the field where, in the long run, her future will be decided.

The Necessary Changes and Their Threat for China

It should be clear by now that the Western and the Chinese way of acquiring and imparting knowledge are as different as their political systems and ideas. In outlining the Western way of acquiring, transmitting and changing knowledge quite incompletely, it can be said that it is the systematic and planned destruction of elements of the existing knowledge and the permanent

search for new and better solutions - as opposed to the improvement of existing solutions.[32] The inherited body of knowledge is used - and this is a social norm - as an intellectual quarry and all knowledge is principally made obsolete by newly acquired knowledge.[33] This concept has a clear analogy to Schumpeter's concept of "creative destruction" which is, in his opinion, the core of capitalism, responsible for the highlights as well as the crises of the system.[34] A Western scholar does not follow inherited social rules but only the rules of the scientific community, the formal rules of logic or his personal conscience.[35]

Though one cannot deny that the Chinese method has led to great inventions in the past, it is beyond any doubt that the European method has been more successful. And if China does not invent an adequate reaction, the material advantage and the political superiority of the West will permanently grow.

China decided about 100 years ago to catch up with the European material standard, and since then the Chinese tried to adopt Western technology and at the same time also to keep the Western mind outside; they failed several times. China stuck - and the horrible events on Tiananmen Square on June 4, 1989, show that it still sticks - to the concept of Chinese cultural characteristics which allows China, by her open-door policy, to get, use and instrumentalize Western technology. But at the same time, China ought to be able to deny its cultural implications.[36]

Many people think that the victory of Communism has brought about radical changes in the Chinese cultural tradition. I regard this a fundamental error and I agree with G. Kirsch & K. Mackscheidt that Marxism (Maoism) is the modern kind of Confucianism or a disguised Confucianism, which allowed to establish a new source of social legitimation while the old one had become obsolete. The old Confucian structures still remain or become even restored.[37]

The question is: Why is China setting her mind so eagerly against the European influence, more than any other country?

The answer is: Europe's ideological influence is seen as a lethal danger for China's social order and culture. I will discuss this thesis here on the topic of modern science:

(a) Modern science implies a permanent search for truth; the Chinese system already knows the truth which is binding for each member. Modern science, and this is perhaps even more true for the

humanites, implies the radical questioning of values fundamental for the social structure. Therefore, every independent research implies the threat for the social system to run out of its control and to endanger it basically.

(b) Connected with the first point is the danger for the prevalence of obligatory rules, mainly the rule of respecting the elder and the superiors because they have shown already that they know how to act according to the rules.

(c) The decision of what is right or wrong will not rest any longer with the society but with the individual. There will develop something like a personal conscience as opposed to formally correct actions by individual persons who have no individual responsibility. The emergence of a kind of individualism, similar to the European type, is inevitable in the long run. This leads to the next point:

(d) The pursuit of science is an egalitarian activity. R.K. Merton has talked somewhere of the bourgeois communism of the scientific community. An egalitarian community of individuals is fundamentally opposed to the strong hierarchical setup of the Chinese society. This is why Chinese intellectuals, infected - in Chinese terms: polluted - by Western thoughts, are always in danger to be put into jail and be subjected to a brainwash. It is not mainly because of them having different ideas but their way of acting as independent and personally responsible individuals is what forms the danger.

(e) Because China has always had only one hierarchy and not different hierarchies and, therefore, also only one way of social ascendance, the emergence of another hierarchy, formed by more or less independent scientists, is interpreted as an attack on the foundations of the social systems, i.e., the state.

(f) The traditional Chinese intellectual who was very often a high ranking official (Mandarin) has never been in opposition to the social system or its ideology, which is quasi-natural in Western culture. To stand in opposition to the system means to stand outside the society and standing there means to stand outside any order, to be asocial, having lost the quality of being a social entity. This

was the worst thing which could happen to an educated Chinese and in some respect this is still valid today.

(g) Because China never developed the concept of scientific objectivity, e.g., in the way Max Weber discussed it, all scientific activity is inevitably a social activity and, therefore, it has to be controlled by superiors. It is beyond any question that this structural condition is incompatible with individual expertise. One way of handling this is the Chinese way of discussing publicly only such issues as problems which have been defined before as problems by the superiors. Then all China discusses a problem and usually the way how to find the solution has also already been defined. Therefore, the discussions serve the self-assurance of the people and not the purpose of finding a solution. The idea of this procedure is to establish social conformity on what is the problem and what ought to be done. It is a device for securing social harmony.

I think it is clear that by adhering to these ideological conditions it will be impossible for China to catch up with the Western countries. On the contrary, I am convinced that China will - in comparison to Western countries - fall far back again and run even into much deeper social troubles because the aspirations of her population have grown but they will be frustrated because of the restricted means accessible to the Chinese.

As Kirsch and Mackscheidt have stressed, China's economical reform will and can only succeed if China is willing to accept a certain amount of legitimate horizontal relations between independent individuals.

The same is even more true for the success of the reform of China's educational system, mainly on the higher levels. Only if the intellectuals must not fear that they will be punished if they publish ideas not in line with the ideas of their superiors is there a chance to catch up with the West.

At least Chinese academics must be allowed to think, to discuss and to publish ideas which are without support in the tradition. They must learn to be deliberately creative.

The very cautious reforms, which have been already smashed by the last campaign against liberal pollution, could not really help because they did not give any of these guarantees for the scholars.

The educational system with its difficult examinations based mainly on memorizing does not encourage students with unconventional ideas. On the contrary, they are being discouraged. But unconventional ideas are exactly what China desperately needs. Therefore, the examination system has to be changed. To do this successfully implies a change in the kind of teaching. This makes it necessary to provide the system with more and better teachers.

Last but not least, it is necessary on the middle-level to change the predominance of training in schools and combine it with an equally valued on-the-job-training for helping the new labour force to better master new technologies.[24]

The preference for formal education, with a high rate of drop-outs, which aims at an elite-education at the cost of all the others is a great waste of resources. The relatively well educated who failed to pass the university's entrance examination are a good reservoir to build up a qualified lower and middle-management, etc., which China is in desperate need of. The obstacle is the traditional system which identifies and restricts the access to certain positions with the passing of certain examinations. This system will become heavily endangered if the distance between the several occupational levels will be narrowed dramatically. I think this lurking danger is felt or even seen and all is done to prevent it from becoming reality, even at the price of wasting enormous human and material resources.

China must understand that her very own, very venerable cultural tradition is the main obstacle in catching up with the West. It must develop active solutions of combining "East and West." Until now, the strategies have always been defensive and did not show any beginning of a lasting solution.

Because China is a huge country recurrent frustrations of the hopes of the population, with subsequent breakdowns of her internal order and periods of inner turmoils, do not serve anybody's interest. Therefore, we should watch the development with great care and help our academic colleagues, as well as the politicians and administrators, to finding a way. But the solution can only come from China itself and the prospects are not very good.

Acknowledgement: I would like to thank Professor D. Karsten for reading the first draft of this manuscript and giving valuable suggestions.

Footnotes

[1] I cannot display or discuss all the social, anthropological or historical approaches used as foundation of the theses presented here. Thus, I will give the references to the main sources of my arguments, which are based on the intellectual efforts of such scientists as: Marvin Harris, Charles E. Lindblom, William McNeill, Mancur Olson, J.A. Schumpeter, Max Weber, or Karl August Wittfogel (see the list of references).

As far as I know the literature on this topic, genuine educationalists unfortunately have contributed little or nothing of substance to this topic. Most of them seem to be engaged either in the description of single issues, e.g., the vocational training, or in value-loaded advices, than in science-guided analysis. Sometimes they do both.

A first, very general approach to the exploration of the cultural differences between "the developed countries" and "the developing countries," although with a different outlook, has been published by my colleague Detlev Karsten and me in 1988 and some of the arguments developed there will be repeated here. See D. Karsten and H. Schweitzer (1988). An analysis of the same problem but dealing with developing countries in general is given in H. Scheweitzer (1988) from which I have taken some complete passages without special citation proof.

[2] See, for example, Th. Chen (1981).

[3] An interesting description and analysis of the reasons for the necessary changes which our ancestors encountered some ten thousand years ago is given in M.N. Cohen (1977).

[4] Many analyses of the widely praised dependency-theories like that of A.G. Frank (1968 and 1980) and writings of the world system theorists like I. Wallerstein (1974) seem to qualify in this category. These theories usually try to explain European supremacy by European exploitation and colonialism of what is called nowadays Third World or developing countries. But this cannot be true because there has been exploitation and suppression in different social, economic and historical situations and, of course, the Europeans are no exception from this. But colonialism and exploitation never before resulted in the emergence of a completely new and overwhelmingly different social, technological, and economic system. All these theories do not and cannot explain Brian May's simple though central statement: "The most obvious significant fact is that while the Portuguese and Dutch had landed in Java, there was no sign of the Javanese in Portugal and Holland" (B. May, 1978, p. 5).

[5] One has reason to doubt if Marx's conception of social development was correct for the European countries, but there can be no doubt that it is not correct for non-European countries. This can be seen very easily, e.g., when the Chinese apply the Marxian classification of types of social development on China's history. Then they find a Chinese "slaveholder-society" or, later, a "feudal society," etc. (See Jian, B. et al., 1981, or Wang, Z.L, 1988, pp. 21-28.)

These terms have a specific meaning for European history, but are meaningless for the Chinese society, for example, because one of the core ideological pieces in the European feudal society, the interpretation of social relations as mutual commitments between the nobility and common people legitimated by God or at least religion, has never existed in China. And this is a very important difference because from this ideology derives most of our modern interpretation of the political rights of the individual.

6 In order that the non-European cultures are not called irrational, we (Karsten and Schweitzer, 1988) have introduced the distinction "explicit rationality" for the European kind of rationality and "implicit rationality" for the traditional way of reasoning. The traditional attitude legitimately relies heavily on the knowledge of former successes which obviously have stabilized the system. Very often this reliance has no reliable basis in the knowledge of the internal functional interdependencies of the system in question. But by sticking to the old traditional rules, supported very often by a religion, the system as a whole will survive in times of slow, quasi natural change.

Different from that, the explicit rationality depends on the knowledge of the internal functional interconnections of the system and its interconnections with other systems. The crucial problem of this procedure lies in the question does one really knows the decisive parts and connections. This is very difficult in the sciences and the technologies, but it is much much more complicated in the psychology or in the social sciences where human values always interfere with the analysis.

Implicit rationality has many advantages but it has, compared with the explicit rationality, its very shortcomings in time of rapid changes: it is too inflexible and less adaptable. Explicit rationality leads, on average, to "better" solutions.

A good rational strategy for changes in developing countries should examine the implicit rational strategies very well before making own proposals because the old methods very often proved to be superior to the newly introduced because they are better adjusted to at least important parts of the specific social and/or natural environment.

7 Among other consequences, two of them are the theoretical foundation and the general social demand for qualified mass education.

8 Those who will read Mark Twain's satire "A Connecticut Yankee in King Arthur's Court" (1889) will get a feeling for the differences. In contrast, a different position questioning modern achievements of all kind is portrayed in E.A. Poe's "Some Words with a Mummy" (1845).

9 The reason for this development is seen by some authors in the multiform geological surface of Europe with many rivers and mountains forming only relatively small continuous areas, providing people with enough surface

water for agriculture and livestock raising. Additionally, rivers and mountains form relative good defence against invaders. All that helped people to form small but viable social organizations which have not been in need of a central authority to survive, for example, because they did not need any irrigation systems for their fields, etc. See K.A. Wittfogel (1977) or M. Harris (1978b).

[10] For a description and an analysis of this development see W. McNeill (1960 and 1982).

[11] War is the ultimate form of social competition and, therefore, Europe, which has been war-torn for centuries, tried to develop specific rules for this competition, e.g., the Hague Convention.

[12] K. Marx (1958); S. 13 (Vorwort). (It is not the conscience of men which determines their being but it is the opposite: their social being determines their conscience.)

[13] The following description relies heavily on the research of K.A. Wittfogel, M. Harris, G. Kirsch, and K. Mackscheidt and I.W. Mabbett.

[14] Wittfogel (1938b) and (1977) is stressing that the main cause for this development was the growing population pressure which made it necessary to expand the areas put to the plough and evade to marginal soil, i.e., here semi-arid or even arid soil. Agriculture there was only possible by building up huge irrigation systems, an effort which surmounted by far the resources of villages, regions and even small states. The construction was possible only by organizing the work of masses of workers.

[15] The description in this chapter refers mainly to the arguments of G. Kirsch and K. Mackscheidt.

[16] Besides, this fear of losing face and slipping out of the social order seems to be one core reason for the ambiguous Chinese attitude toward sexual relations. Because they always imply a strong anarchistic tendency, they must be controlled socially very strictly. In principle, there must be no room for this part of sex, otherwise it may become overwhelming and endanger the delicate fabric of vertical relations.

[17] A fine description of the early times of this system is given by T.H.C. Lee (1985).

[18] I.W. Mabbett (1985), p. 168.

[19] See I.W. Mabbett, pp. 169-170, and T.H.C. Lee (1982), where statistics are computed for the Sung Dynasty in various tables.

[20] See, for example, G. Kirsch and K. Mackscheidt, p. 108 ff or I.W. Mabbett.

[21] Here we can identify the strong affinity between the general communist concept of a centralised planned economy and the genuine Chinese approach to dealing with social problems. Both concepts imply the knowledge of the

results - for logical reasons. A plan is an anticipation of a desired result. In Western understanding a plan, therefore, suffers from the inevitable shortcoming of being restricted in its scope to the knowledge available when the plan has been designed. Therefore, seen with Western logic, a plan can have only a limited validity.

But in Chinese thinking a plan means the application of a principle to a specific situation and if the principle has been displayed correctly, the plan has an unrestricted validity. Therefore, in case of a failure in Europe and in China, the search for its reasons will run in completely different directions.

[33] To understand better the differences between the Chinese and the Western attitude, it is helpful to take a comparative look at the development of Chinese and European art. The Chinese periods of art are classified according to the dynasties which constitute more or less distinctive styles; the European art is classified according to changing styles (Baroque, Rococco, etc.), which sequences are accelerating since the middle ages, or according to the names of individual rulers (Louis XIII, Victorian, Wilhelminisch, etc.). If a Chinese style lasts about 300 years in average, very roughly, the European style lasts about 30 years.

This example also makes clear that in Europe we do not really have a distinction between the two cultures, the scientific-technical and the literal, as it was suggested by Snow (1969), but we have different expressions of the same attitude of permanent change.

[34] About some of the psychological problems imposed by this system on the individual scientist, see M. Weber (1919, 1982).

[35] One may say that the analogy is going even further: in the capitalist economy, Schumpeter's creative entrepreneur is what the creative scholar is in science and humanities.

[36] Here lies one of the difficulties of binding scientists by a code specifying norms of social harmlessness of their research.

[37] The motto of this policy is: Learn from the West, but stay Chinese; see, for example, K. Grobe (1982) and for the development of the delicate Chinese relations with foreign countries, K.S. Liao (1986).

[38] The last years there has begun a real renaissance of preoccupation with Confucius, his thoughts and the modifications by his followers and their importance for China.

There are also some material indications for the newly growing appreciation of Confucius: I have been visiting Chinese universities several times with groups of students and in former years we got as a gift coins with heroes of the revolution. In 1986, for the first time we got a coin with Confucius.

[39] See M. Risler (1989), p. 253 ff and p. 317 ff.

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ADULT HIGHER EDUCATION IN CHINA: WHAT ROLE SHOULD COMMUNITY COLLEGES PLAY?

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Introduction

This paper is mainly based on primary sources -- the author has interviewed over a dozen of community college people, who are being trained at Onley Central College, Illinois, to be the community college leaders once they go back to work in China, and those who were on an education delegation to the U.S.A. not long ago. Many of them have already been in administration for a number of years either as community college presidents or vice presidents. The training program at Onley Central College is an exchange program between the United States and the People's Republic of China, sponsored by the World Bank. The author's own observation and experience as well as secondary sources -- printed materials -- have also been used to prepare this paper, which compares the institutions of adult higher education with the regular institutions of higher education in China. Emphasis is given to the roles that community colleges should play in higher education and in the whole society. The paper includes public and official opinions toward these institutions and the difficulty that these institutions are confronted with. The author also airs his own viewpoint regarding the trend of development of these institutions.

Development of Higher Education

In the past few years great changes have taken place in the People's Republic of China's higher education, which has now become a blend of various types of institutions -- centralized and decentralized, large and small, public, semi-private and private. In China, there are 1,075 regular institutions of higher education with a total enrollment of 2,066,000 students in all. In 1988, these regular institutions of higher education enrolled 670,000 freshmen.

However, another type of institutions of higher education which is called "institutions of adult higher education" and numbered 1,399 enrolled 698,000 freshmen students in the same year with a total enrollment of 1,728,000 students by the end of 1988 (source: Xinhua News Agency, People's Daily, Jan. 12, 1989; Li Tei Ying, Commissioner of Education of PR of China, People's Daily, Jan. 12, 1989, p. 4). Not many people outside of China know about this kind of institution, which represents a new trend in the development of China's higher education. It is very important to share with educators from different countries and regions the development and the trend of China's higher education because even a small step forward is some kind of progress made by 1/5 of the total population in this whole world.

Despite the terminology difference, institutions of adult higher education in China do have almost all the characteristics of community colleges as we know here, although there are some different aspects. Therefore, adult higher education institutions in China are more or less the same as "Community Colleges" in the U.S. and some other countries in terms of mission, curriculum, faculty or students. In terms of enrollment, in the U.S., about one half of undergraduate students are in community colleges. China's adult higher education institutions in fact enrolled far more freshmen students than the regular institutions of higher education. However, community/junior colleges in the U.S. are very closely related to four-year colleges/universities, whereas in China, regular institutions of higher education and adult higher education institutions are literally two different systems: students at adult higher education institutions cannot transfer to four-year colleges/universities, etc. Both similarities and differences are discussed in the following sections.

Differences

There is not much students' age difference between the institutions of adult higher education and the regular institutions of higher education. They differ from one another in that regular institutions of higher education are Central Government-approved institutions with the Central Government as the source of greatest financial support, and are either national or provincial institutions on the basis of full-time and day-time, while the other type of institutions, although most of them are public institutions, got approval from provincial governments or agencies upon founding with a few exceptions. Unlike

the U.S., whose states are responsible for education, China's Central Government is responsible for the country's educational affairs. Therefore, these institutions of adult higher education, which were approved by provincial governments and registered by the Central Government, are not considered the same as regular institutions of higher education.

In general, among the senior high school graduates, the top students with highest scores in the national entrance exams attend regular institutions of higher education, while those who did less well attend institutions of adult higher education.

The difference also exists in the faculties and facilities. The faculty members of the regular institutions of higher education are of much better quality than that of the institutions of adult higher education in terms of academic preparation, credentials and research experience.

Although most institutions of adult higher education are public institutes, there are a considerable number of semi-private or private institutions of adult higher education (source: People's Daily, March 10, 1988).

As a result of the differences mentioned above, the diploma awarded by the regular institutions of higher education is recognized nationally, while the diploma awarded by many institutions of adult higher education is only recognized or considered an equivalent regionally.

If we transfer the students who were enrolled by regular universities and colleges into ranking, they would normally be ranked the top 15 percent, while those who attend adult higher education institutions would be ranked the next 10 percent. As at least 1/3 of the students who attend adult higher education institutions are in their thirties or forties, the actual class ranking would be higher because China enrolled very few college students in late 60's and early 70's. As a result of this, many top graduates of 60's and 70's have adult higher education institutions as their only choice because of age limitation. This is not yet the normal age-group people, because only 1/3 of junior high school students in China are able to go to senior high school. So, the academic quality of students at the community colleges should be very good.

Classifications

Chinese institutions of adult higher education, or rather, community colleges, can be classified as follows:

1. The various branches of the Radio and Television University, which are found in almost every city and most counties all over the country including minority areas, are generally regarded as institutions of adult higher education, although the Radio and Television University did get approval from the Central Government upon founding.

2. Evening programs and correspondence programs operated by regular universities and colleges. They are considered different from the regular programs because the entrants do not take the same national entrance examinations as the entrants to the regular institutes do, or they did not perform as well; moreover, many students enrolled in these programs are not on the full- and day-time basis. The tuition and fees for these evening-program students are also considerably higher than that for the regular students.

3. A large number of local higher education institutions which are called city-level institutions of higher education, i.e., they only got approval from the provincial governments or just from the city governments. City-level higher education institutions, which are regarded as an innovation, include Staff and Workers' Universities (a kind of higher vocational and technical education), Self-study Higher Education Examinations, Education Institutes for In-service Teachers, Peasants' Universities, and some others. For example, vocational universities and institutes like Jinglin Amateur University at Nanjing and Jianghan University at Wuhan are very well known vocational and technical higher education institutions with quite high academic standards. Many of their graduates are employed by the local governments and even by some regular universities/colleges as faculty members. Nevertheless, they are not recognized nationally as they are city-level institutes and, therefore, are adult higher education institutions.

4. There are numerous private higher education institutions like independent correspondence colleges, correspondence programs operated by various magazines and periodicals, etc. Most of them are functioning as adult higher education institutions; however, many of them fail to obtain recognition from the State Education Commission, which holds that this type of informal higher education is not as good as the previous three types in terms of academic standards. Therefore, the students of these institutions are not included in the figure mentioned earlier. Nevertheless, private institutions of higher education recently are developing rapidly in China's higher education. In the area of Beijing alone, there are now over 40 private higher

education institutions (source: People's Daily, February 12, 1988, p. 4). So, their role cannot be neglected.

5. Various institutes operated by the Communist Party, Armed Forces, provincial or city governments are also considered as institutions of adult higher education, although the academic quality of these institutions remains to be challenged.

6. Last but not least, among 1.075 regular institutions of higher education, there are about 350 institutions* that only or mainly offer 2-year or 3-year academic programs at the undergraduate level without awarding any bachelor's degrees; the diploma awarded by these institutions is recognized nationally and also is internationally considered an equivalent to the associate's degree awarded by community colleges in the U.S., therefore, in spite of the fact that they are part of the regular institutions of higher education, they should also be classified as community colleges.

In addition, a few semi-private institutions of higher education that occurred recently in China also take some responsibility of adult higher education (so-called "semi-private" universities because they differ in financing and governance from the regular higher education institutions). There are two different types: (1) overseas-Chinese-sponsored universities like Shantou University in Guangdong Province, Ningbo University in Zhejiang Province, and (2) the universities like Jiangnan University in Jiangsu Province, the Central Social Sciences Academy in Beijing sponsored by industries and/or political organizations. There is no difference between the first type of semi-private higher education institutions and regular ones in terms of faculty, facilities, or school quality. However, the governance of the institution is quite different from those regular institutions of higher education. It is the Board that governs the institution, although Communist Party organizations are always in existence on campuses. The final decisions regarding faculty recruitment, student admission standards, degree requirement, construction and use of educational facilities, etc., are made by the Board, which sometimes delegates the executive administrators with authority to implement some of the missions mentioned above. These institutions also have

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* The most up-to-date data are not available but, by the end of 1986, there were 342 institutions of higher education offering 2-year or 3-year programs (source: Research on Higher Education, Journal of Nanjing University, p. 87, 1988/3).

much more flexibility than others in deciding enrollment and/or degree requirements, recruitment of faculty, and curricula. Therefore, they are somewhat different from regular higher education institutions. Interestingly enough, the diplomas awarded by these institutions are fully recognized by the central and local governments.

Demand for Community Colleges

Before China opened its "bamboo curtain," China had very few institutions of higher education at junior/community colleges level, approximately 150 in all, and all were Central Government approved institutions. In China, the occurring of large numbers of community colleges is very closely associated with the country's development of the economy. It has already been proven that community colleges do help meet the increased demand for college and university entrance, as there has been a great shortage of qualified high-level manpower in certain fields like law, management and administration, accounting, etc. According to the authorities' estimates, China will need at least 50 million specialists and experts in industry, agriculture, transportation, construction, education, research, computer technology, etc., by the end of this century. However, the regular universities and colleges will be able to produce only about 1/3 of these specialists. Regular institutions of higher learning are not likely to help educate the rest 2/3 people. In addition to this, millions and millions of people should receive in-service training for their professional growth and it will be impossible for regular higher education institutions to take this responsibility. So, community colleges could, and should, play a role. As a matter of fact, they are playing a more and more important role in higher education.

Criticism of Community Colleges

One of the serious problems with adult higher education is that quite a number of institutions, both public and private, especially in private institution, "sell" diplomas to individuals who have not taken any coursework, no examinations, literally nothing except paying a handsome sum of money. This has caused much societal criticism.

Partly because of this and some other reasons, adult higher education institution graduates have not been treated like regular university or college graduates who automatically become government employees and whose future

employment is life-long and guaranteed, with private institutes being in a worse situation. An official from the State Education Commission expressed regret, saying that many private and semi-private higher education institutions' graduates have not been treated fairly and they are really equal to regular higher education institutions' graduates in terms of academic excellence.

In response to this, the spokesman of the private institutions in Beijing stated that it was true that they did not have qualified full-time faculty, but they employed tens of thousands part-time faculty and 95% of these part-time professors came from more than 50 regular universities and colleges in Beijing; as the staff/student ratio in those regular higher education institutions is only 1:4.2, most faculty members can afford enough time and energy to take some responsibility in the private and semi-private universities and colleges. Moreover, almost all the teaching materials have been compiled or edited by nationally known scholars. According to a follow-up investigation of some private higher education institutions' graduates, 85% of them have been employed according to their major, and 40% of them have received promotion since they began their professional careers following graduation.

Since there is a much looser age limitation to the applicants for community colleges in China in comparison with the age limitation to applicants for regular institutions of higher education, it could be regarded as a good beginning of life-long education. Indeed, everyone should have the equal opportunity to pursue his or her proper education that fits him or her despite age or being physically handicapped. The admission decision should be made solely based on academic preparation. "Live and learn" could be realized and everyone could be ensured the opportunity for appropriate education in the future.

Adult Basic Education

However, community colleges could play a role in another important area where little attention has been paid: in helping those illiterate and semi-illiterate people. In China, there are 220 million illiterate and semi-illiterate people, equal to the total population of the United States. This is a really alarming figure! It is impossible for China to realize its modernizations without advanced manpower, but it is also impossible for China to realize its modernization with over 1/5 population that is illiterate or

semi-illiterate. China now is confronted with a large group of undereducated, underpaid in the population. The only way to change this is to provide quality education for all citizens. Community colleges should take the lead and play an important role in helping those illiterate or semi-illiterate people. Many educators in China tried hard to help those illiterate people learn how to read and how to write in the past but did not make much progress. Not enough government funding was one of the factors that caused this failure, but there was something else that might explain this failure.

Chinese, like many other oriental people, are very shy and afraid of "losing face." To ask them to study in an evening program of an elementary school, many of them are reluctant to go. But, if they are asked to study in an evening program at a community college, many of them would be willing to attend, although the two evening programs may offer exactly the same curriculum. As the Central Government and local governments are ready to allocate some funding for educating those illiterate and semi-illiterate people, the community colleges may well take this opportunity to renovate their educational facilities to serve both illiterate people and their own students.

As a matter of fact, this is nothing new. The community colleges in the United States have long been offering Adult Basic Education programs.

Improve Quality Education

Joint efforts should be made to improve quality education at all community colleges. Right now, many community colleges have some trouble to recruit faculty members and to enroll students because of their "secondary citizenry status." If the transcripts could be transferred to other regular institutions of higher education and if some regular institutions are upgraded to upper-division, i.e., senior colleges/universities that offer junior and senior curriculum and master's degree program, this difficulty could be easily overcome. Ironically enough, graduates with a diploma awarded by community colleges could apply for graduate studies, but are not eligible for senior undergraduate studies.

In spite of the ridiculous hierarchical bureaucracy that exists everywhere in China, including adult higher education, all the community colleges, however, should consider the issue of the quality of education seriously. If they intend to compete with regular institutions of higher education, every

institute should see to it that the number and character of the courses offered be equal to that of the regular institutions of higher education, that every community college be equipped with suitable classroom, laboratory, and library facilities in addition to a sufficient number of properly qualified faculty members on the full-time basis. A sufficient number of full-time teaching appointments would ensure continuity and stability of the educational program as well as to provide adequate educational association between students and faculty.

The institutions of adult higher education have great advantage over those regular institutions of higher education regarding improving the quality of faculty. For those regular institutions of higher education, they usually do not have many vacancies for senior faculty members. Despite fancy academic titles like professor and associate professor, many senior faculty members' highest academic credentials are bachelors' degrees. Since they do not have many openings, plus the housing problem, it is very difficult for them to upgrade the faculty's credentials. Adult higher education institutions, however, are usually newly established institutions and usually have some openings for senior faculty members. They could and should recruit new faculty members with master degree in a related field as a minimum requirement. And, they may also be able to recruit Ph.D. degree holders to fill senior faculty positions -- there is a big human resource at home and abroad: 113,000 graduate students at home and about 30,000 graduate students pursuing advanced degrees in the U.S. and many developed countries.

Community Colleges' Future

It is some educators' opinion that the days are numbered for adult higher education institutions and they are a temporary phenomenon. As education reform is carried forward, more and more regular higher education institutions will be established to replace institutions of adult higher education. However, many educators hold an opposite opinion. They argue that institutions for adult higher education will exist for a long time because of several reasons. For one thing, China's higher education is far from mass education, and is still elite education, which does not fit the development of the world or the country. For another, political reform and personnel reform require more and more people to receive higher education.

With the new trend that graduates of the regular universities and colleges will not automatically receive permanent employment as civil servants upon graduation, the standard of measuring academic quality has to be reconsidered because the various enterprises, industries and government agencies will employ those who possess real ability and who meet the practical requirements. In 1988, a few regular higher education institutions, including the best-known polytechnic university Qinghua, were asked by the Central Government to carry out an experiment: graduates with bachelor as well as master degrees have to look for employment themselves. The universities, instead of allocating their graduates according to the state budget as usual, only act as coordinators and counselors this time (source: People's Daily, May 11, 1988, p. 4). As such, it is estimated that competition will occur among graduates of different kinds of higher education institutions. It has been decided that all new college/university students that are to be enrolled this year (1989) will have to look for their jobs when they graduate in 1993. As a result of this dramatic change, competition will not only occur among graduates of regular institutions of higher education but also between such students of regular institutions and institutions of adult higher education. Besides, graduates of private and semi-private universities and colleges will be able to participate in such competition on a fair basis. It is possible that a dual higher educational system may occur in China, i.e., private sector and public sector may exist at the same time. However, this is not the theme of this paper.

One can see clearly that great changes have taken place in China's higher education over the last few years. All these changes are quite positive and encouraging, although it is difficult to predict what will come of educational reform. Hopefully, the ongoing political, economic, personnel and educational reforms will bring some positive effect to China's higher education, which seems to be quite promising considering the remarkable development of institutions of adult higher education made so far. There is no doubt that much needs to be done and many problems remain to be solved regarding, for example, educational policies, administration, curriculum and instruction, and faculty growth.

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THE RINKYOSHIN AND HIGHER EDUCATION: SOME TENTATIVE THOUGHTS

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When I first decided to treat the subject of higher education in the context of Rinkyoshin[1] recommendations, I naively believed that preparing this paper would be a relatively simple matter. As is often the case, however, the complexity of the topic became clearer as the date of the panel drew closer. I must emphasize that this presentation is in a highly tentative, relatively crude form. I hope that our discussion of it will help me see its weaknesses more clearly as I continue to work on it in the coming months. What follows, therefore, are a few of my tentative reactions to the work of the Rinkyoshin as they relate to the higher education sector.

First, however, a few words about the history of educational reform in Japan, followed by a brief comment on the Rinkyoshin. Japan's first modern educational reform movement occurred during the early Meiji era (1868-1912) when a national system of mass education was instituted as a key element of the nation's rush toward modernization. This was an exciting period when Japanese leaders searched the world for models most appropriate to the realities of their situation and adapted those models to those realities.

The second period of educational reform occurred during the American Occupation following World War II (1945-1952) when the victorious Americans sought to first demilitarize Japanese society, and then to decentralize and democratize it along American lines. This resulted in the destruction of the prestigious Imperial universities as well as their impressive system of feeder schools in order to foster "democracy." Former normal schools and higher schools were given university status as national universities were established in each prefecture. In addition, numerous junior colleges were set up to provide alternative opportunities to young people.

By the mid-1970's, there was increasing talk in the Japanese media and in political and education circles about the need for still another reform. Rumblings were heard about the need to redress such problems as the overly demanding pre-university curriculum, too much reliance on rote learning, and a dangerous over reliance on the infamous entrance examination system, and a resulting "diploma disease." Most important, however, was the perceived need to modernize higher education so it would be able to meet the challenges of the twenty-first century.

Thus, the current reform efforts marks the third major education reform movement in modern Japanese history. One of the major differences of this movement with previous ones, however, is that it is not primarily motivated by external threats (as in Meiji), or imposed from outside (as in the Occupation), but is generated by primarily domestic forces. Indeed, even the Ad Hoc Council on Educational Reform (Rinji Kyoiku Shingikai), or Rinkyoshin, was a unique body within the Japanese tradition of educational reform. Previously, similar bodies have been organized and selected by the Ministry of Education, assigned a clearly demarcated area of study, and worked in virtual secrecy until their final reports have been submitted to the Minister of Education. One of the truly significant characteristics of the current reform group, however, is that its members were personally appointed by then Prime Minister Yasuhiro Nakasone and they reported directly to him, thereby bypassing the Central Council for Education and the Ministry of Education (Mombusho) bureaucracy.

As Kenneth Pyle has pointed out in the Journal of Japanese Studies, one of the characteristics of Nakasone's political style was to appoint "an unusual number of ad hoc commissions . . . to highlight his pet proposals and to bring forth largely predetermined policy recommendations . . . In this way, he was able to shape the policy agenda and to invest his ideas with the legitimacy that came from the support of distinguished panels."[2]

One of the more interesting elements in the Japanese reform movement is Japan's changing relationship with the West. Whereas Western countries have traditionally, at least since the Meiji era, served as a model for Japan, her current quest for technological superiority finds no ready made model to emulate. Thus, the Japanese can no longer systematically investigate and adapt foreign models, but must literally create a new model. For the first time Japan becomes the model that the West emulates!

The Council's 25 members were selected from a variety of backgrounds and philosophical positions. Their collective task was nothing less than to develop reform proposals that would transform Japanese education into an efficient vehicle to prepare the nation for the changes sure to accompany the twenty-first century.

The Council, chaired by Okamoto Michio, former President of Kyoto University, was divided into four subcommittees, one of which was assigned higher education. The higher education group was chaired by Iijima Soichi (61-year-old President of Nagoya University) and its membership included Hosomi Takashi (64-year-old President of the Overseas Economic Cooperation Fund), Sejima Ryuzo (a former staff officer of the Imperial Army and an advisor to C. Itoh & Co.) and Sunobe Ryozo (66-year-old former Vice-Minister of Foreign Affairs).

Educational reform, in the best of times, is a very difficult thing to carry off successfully. There are always entrenched groups which benefit from the existing system and are reluctant to risk their power and position. Japan is no different than others in this regard.

It is my position that most of the proposed reform measures dealing with higher education will either quietly slip into the dusk of history and be forgotten, but those measures which must be adapted in order to survive will be embraced by the higher education community. Let me outline an example of this probable outcome.

Japanese education enjoyed a rapid and unprecedented expansion -- in enrollments and financial support -- during the 1960's. This "golden age" slowed considerably by the early 1970's and a few years later entered a period of no expansion and, on balance, negative growth or decline. Today Japanese higher education is faced with a demographic shift which threatens it even further. Thus, if one wants to understand the future realities of Japanese higher education, one needs to pay attention to demography.

For example, the cohort of Kindergarten age children is at its lowest point since the World War II "baby boom" and, as a result, most kindergartens have been forced to cancel almost half of their classes. The number of kindergarten pupils in Japan shrunk by 25 percent since 1979, from some 2.5 million to about 2 million last year. It doesn't take great insight to recognize that as this declining number of pupils winds its way through the system it will have profound effects on higher education. It is also estimated that the pool of

college entering students (18 year olds) will continue to increase until 1993, but by the year 2000 will drop off sharply to fewer than exist today. Thus, the question of declining enrollments that faced American universities in the recent past will face their Japanese colleagues.

Professor Kitamura Kazuyuki of Hiroshima's Research Institute for Higher Education refers to the 1990's as an "age of institutional self-selection" in which the very existence of many educational institutions will face contraction or even closure. This will be a relatively new experience for the Japanese as not a single university was closed between the creation of the first national university in the Meiji period and 1978 -- a period of a 110 years. Indeed, since the great expansion following WW II only a handful of the 485 new universities created since 1950 have died an institutional death while 42 of 647 private junior colleges have met the same fate in this period.

Although there are real dangers inherent in the demographic situation outlined above, it can also be an opportunity to those institutions flexible and creative enough to take advantage of the situation to attract students from a different pool. This need to attract non-traditional students is not confined to Japan. A recent OECD study describes "the greying of the campus" in these words:

[In] most OECD countries . . . higher education is undergoing a gradual, yet radical, change. While classroom teaching, full-time courses and students of the traditional age group are still dominant, off-campus provision and independent learning, part-time study and adult students are clearly and steadily on the increase.

In addition to a decline of applicants in the tr`ditional talent pool, Japanese society in the 1990's will also be characterized by a number of important structural changes. Not the least important of these is the apparent changes in Japanese employment practices. There are signs that Japanese industry is beginning to transform its traditional system of "life long employment" so that there will be less incentive to recruit all of their employees fresh out of university. In addition, diversification of the student population appears to be in the cards. Institutions dependent upon tuition for their survival, i.e., most of the private sector, will need to attract large numbers of non-traditional students and even foreign students if they are to survive in an era of a sharply decreased Japanese student pool. This element will be exacerbated by increasing competition for Japanese students from

foreign, including American, universities that are actively recruiting Japanese or building so-called branch campuses in Japan.

When seen in this light the Rinkyoshin recommendations for life-long education, internationalization, etc., take on a different meaning. The situation now facing Japanese higher education presents a serious challenge to universities which have enjoyed steady expansion in much of the postwar period.

Those higher education reform recommendations relevant to the coming crisis will be seen as useful tools in coming to grips with this new situation and are likely to be adopted. Those recommendations which tread on the toes of powerful vested interests will quietly be buried. Thus, lifelong education and internationalization appear to be strong candidates for implementation. Both at least offer the possibility of significantly expanding the student pool, revitalizing the university curriculum, and adding a new level of talent to the already formidable Japanese economic structure while, at the same time, not threatening the higher education power structure. The important, unanswered question, however, is, if this analysis is correct, will Japanese higher education be forced to learn a "management of decline" administrative style, or will the implementation of selected Rinkyoshin recommendations allow higher education to attract a sufficient clientele to prosper?

Footnotes

1. Rinkyoshin is the abbreviation for Rinji Kyoiku Shingikai, or "Ad Hoc Council on Educational Reform."

2. Kenneth B. Pyle, "In Pursuit of a Grand design: Nakasone Betwixt the Past and the Future," The Journal of Japanese Studies, 13, 2 (Summer, 1989), 253.

WILL ONE HAVE TO BE TRAINED "NATIONALLY" FIRST IN ORDER TO BE EDUCATED "INTERNATIONALLY?"

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Inasmuch as the title of my essay does not convey a clear direction of argument, let me start with its brief outline. At first, I will analyze the two conflicting positions on education for internationalization as emphasized in Japan for the past few years. Then, I try to reconcile these positions by shifting the focus of argument from curriculum to learning or instruction. Finally, on the basis of this reconciliation, I propose that the current assumptions on the exchange of scholars be partly modified, especially with reference to those doing regional studies in the humanities and social sciences.

I

In the midst of mounting pressures to internationalize Japan's attitudes to other countries and cultures, a few cool-headed Japanese scholars have lately traced their original meaning of "internationalization" and strongly admonished their fellow countrymen not to be easily persuaded to internationalize. Hasegawa Michiyo, a young philosopher, found that, contrary to what the most Japanese had believed, "internationalization" in history had little to do with the change of popular attitude. Rather, "internationalization" originated in power politics, and referred to cases such as the internationalization, by some Western nations, of the Suez Canal or of a certain colonial territory. In other words, "to internationalize" was not an intransitive verb, but was primarily a transitive one. Taking advantage of Hasegawa's "discovery," Nishio Kanji, a noted scholar in German literature, has more specifically warned Japanese about the realistic consequences of internationalization. According to Nishio, as in the cases of West Germany, Great Britain, and France, the substance of internationalization was nothing other than the massive arrivals of foreign manual workers, which created a

hot-bed for class-oriented society. This state of affairs was something antithetical to what the Japanese would envisage as an "internationalized" society, and it would have to be avoided at any cost. The essence of internationalization should consist in the equal treatment of other countries and cultures, and not in "internationalizing" one's own country with many nationals. Seen in this perspective, it is European nations, argues Nishio, that had to be really internationalized in an intransitive sense.

Thus, both Hasegawa and Nishio distinguished realities and myths of "internationalization." At the same time, they equally emphasized the significance of the cultural integrity of a country as a major pre-condition of internationalization in a intransitive sense. For, by definition, to treat others as one's cultural equals would entail that one already had the substance of its own. In other words, to be really internationalized, a member of a country had first to be thoroughly trained nationally.

As could be expected, such an argument often goes to extremes. Thus, an educated German lady who was naturalized to Japan made a sweeping assertion in a college presidents' meeting on internationalization. She held that every Japanese music student, before he/she played Beethoven and Mozart with the piano, should have first mastered the Koto or Shamisen, a traditional Japanese musical instrument.

Many have apparently taken such an argument significant only as aphorism. In that meeting her argument invited a lot of negative reactions. Those opposing held that the mastery of a national musical instrument or two by no means guaranteed a person as a supernational human being. On the contrary, one's having become an educated representative of a country, who could explain in a foreign language about his/her own country's culture, was definitively short of being internationalized. An internationalized person, in their judgment, had to be so trained that he/she should transcend national boundaries in some respects and serve global purposes.

Thus, one group seems to hold that only a true national education can serve international purposes. Otherwise, an international education would be simply hollow. The other group maintains that such a position will lead to an awkward and mythological conclusion that the most nationalistic education represents ipso facto the most international education, and that it will ultimately serve narrow purposes. On the contrary, this group asserts, free from any national fetters and shackles, an international person should be so

trained that he/she be able to take any position, regardless of his/her nationality. For the sake of simplicity, let us call the first the traditional or nativist position, and the second, the internationalist.

Now, if we ask which of the two positions is correct, the inquiry will come to a deadlock. Neither will yield to the other to the very end. A way out of this impasse is found, I believe, in the shift of the framework of argument. Both nativists and internationalists seem to focus upon the question of what to be taught and mastered: they argue in curriculum terms. One position claims that the contents of education should be those deeply rooted in a country's cultural tradition. The other holds that such contents should go well beyond the national boundaries and seek something global. Thus, emphasis upon one position inevitably leads to de-emphasis upon the other. Only very vague philosophical arguments seem to reconcile the two.

II

I propose to look at the two positions from the point of view of learning or instruction, rather than that of curriculum. For, by doing so, we find that the two positions in fact re-enforce each other. When seen in the perspective of learning or instruction, the traditionalist position ceases to be merely nationalistic. Its argument points to the fact that the learning or instruction of foreign subjects tends to become superficial or shadowy, and sometimes even misleading. In contrast, the learning of native subjects often take proper root in the minds and habits of students. In other words, we cannot dare to impart or acquire foreign subjects without somewhat jeopardizing the sort of accuracy that accompanies the mastery of native subjects. The nativist position seems to offer a powerful antidote to, or a warning against, a certain version of internationalism in education.

The point of view of learning or instruction also enables us to detach ourselves from an unconditional commitment to the nativistic position, because, in this perspective, the traditional, indigenous subjects stand out, not so much because they are valuable by themselves, but because they afford a solid learning or instruction. However, one may ask, doesn't such a learning or instruction help perpetuate, after all, traditional symbolic structures, and hence end up with promoting the isolations of one country or culture from others? National boundaries in scholarship still exist, notably in the humanities and social sciences, posing a problem for international cooperation

in higher education. Given our previous analysis, how can we organize or reorganize the international cooperation in higher education, or more specifically, the international exchange of scholars, so that broader and deeper perspectives may be cultivated, through the studies of native and congenial subjects, on the part of scholars as well as the general public?

III

In the rest of my essay, I would like to propose that each country should consistently invite from foreign countries a limited number of exceptionally qualified scholars whose major areas of study fall in that very country. That is, a few major universities in Japan, for instance, should regularly invite from Korea, the U.S., Canada, etc., a few outstanding Japanologists and ask them to give lectures and guide students. Similarly, a few universities in the U.S. should appoint as visiting professors a limited number of selected scholars from Korea, Japan, Canada, etc., whose areas of study are American history, culture, or society.

Let me illustrate my point by making a specific example. A few decades ago, in our country, we had Japanologist Edwin Reischauer as U.S. Ambassador to Japan. In part because of this visible position, but largely because of his novel interpretation of modern Japanese history, a few of his writings appeared promptly in Japanese translation. Among these, a booklet entitled A New Way of Looking at Modern Japanese History (1965) enjoyed a huge readership and proved influential. I hasten to add that the Japanese reactions to Reischauer's views turned out more often negative than affirmative. In particular, a number of Marxian historians severely criticized his interpretations for lack of class analysis. Nonetheless, hardly anyone can deny the fact that Reischauer's arguments on modern Japanese history left a kind of permanent deposit in historical scholarship in our country, and even among the leftist historians.

Why did this occur? There were many reasons, perhaps. Among these, he was scholar-ambassador from the most influential country. Again, the modernization theory perfectly harmonized with the bustling atmosphere of unprecedented economic growth during the 1960s. And yet, the most important reason for his success, I believe, was that he was a first-rate scholar in Japanology, and that he lectured on, discussed, and published on that very subject in Japan. A huge Japanese audience, including historians who had been

naturally interested in the subject, were willing, in one way or another, to listen to him.

Personally, I am not sure if, as a historian, Reischauer stands abreast with scholars such as Merle Curti or Arthur M. Schlesinger, Jr. However, I have no doubt that neither Curti nor Schlesinger would have exerted the kind of influence upon such a large audience in Japan as did Reischauer, even if either of the two had stayed in our country for some time. Precisely because Reischauer was a Japanologist, he succeeded, through his reconstruction of those historical facts which were familiar to us, in transmitting to the Japanese a new American spirit in scholarship or a new methodology in history, or, in his own words, "a new way" to look at modern Japanese history.

What is especially intriguing about this example is a synthesis of the two positions: the nativist and the internationalist. The Reischauer case has incorporated the strength of the nativist position in that his subject was so familiar to the majority of the Japanese people that they could join in the discussion without becoming superficial. At the same time, however, Reischauer posited in our midst a basic challenge, by offering the novel and characteristic interpretations of modern Japanese history, something that went well beyond national boundaries.

Even at present, the dominant tendency in the international exchange of scholars is to invite from a country specialists on its own subjects: Korean literature professors from Korea, Japanese Buddhism professors from Japan, American history professors from the U.S., and so on. To promote international cooperation in higher education, this basic tendency will have to be in part reversed. The basic schemes for exchange, including governments', foundations' as well as universities' policies, should be partly, but definitively, modified, so that some priority shall be given to the appointment, as visiting professors, of selected foreign scholars specializing in the subjects concerning their host country.

Some may duly point out that a few serious problems stand in the way to the proposed exchange system, such as: (1) the language for teaching medium; (2) the qualifications of foreign, visiting professors when judged against the academic standards of host countries; and (3) the problem of academic nationalism. Let us briefly examine these one by one. As for the teaching medium, it can easily be assumed that an American scholar specializing in early Meiji history shall already have a considerable command of Japanese, at least

incomparably better than his colleague doing Jacksonian democracy. The same may be said of a Japanese professor studying American history, if compared with his fellow professors doing Japanese history and Japanese literature. With some improvements in college and post-graduate level language training, the language problems may be surmounted, especially for the selected few.

As to qualifications, we should not be too optimistic even for exceptional scholars. Nevertheless, concerning the general reputations of foreign scholars, the following may be pointed out. In the past, largely because a host country tended to invite from other countries specialists in these countries, the host might have been often disappointed by the so-called academic standards of the appointed scholars. When invited by a Japanese university for a few years' appointment, a first-rate American scholar doing American history would certainly hesitate to accept the offer, for he would meantime almost suspend his original research, an act of scholarly suicide. Exactly the same may be said of a first-rate Japanese historian doing Japanese history who was invited by an American university. No wonder that scholars from abroad, in the humanities and social sciences, have been viewed with somewhat skeptical eyes. In contrast, a first-rate Korean scholar doing American history will doubtless welcome a visiting position in the U.S. The same may apply to excellent American Japanologists of Reischauer's stature when they are invited to Japan. These selected and willing few, I believe, will invariably give favorable impressions to host countries with regard to their academic qualifications.

Finally, on academic nationalism: Here, I would like to argue that the sense of exclusiveness, allegedly held among scholars doing native subjects, is not as strong as is often assumed. Compared to any foreigners, they are the experts with the greatest confidence in their own studies, and rightly so. Thus, a prejudice against, as well as undue admirations of, foreign scholars die hard among specialists in foreign subjects. By exchanging scholars along the line herein proposed, we may succeed in disarming the obstinate and often-harmful nationalism in scholarship.

The proposed exchange of scholars shall entail a few changes in the system of training scholars. These include intensive training in foreign languages for college-level regional studies students, honors junior-year-abroad programs for such students, intensive foreign language training with strong academic orientations on graduate school levels, and post-graduate programs. Again, the

career patterns of the exchange scholars will have to be outlined and designed, along with their status in home institutions, because the selected scholars are expected to spend as much as one-fourth or one-third of their active years abroad. Details on these and others shall be discussed elsewhere, hopefully, in the near future.

Given the title of my presentation, I have been frankly delinquent and have not squarely discussed whether our youngsters should be educated nationally first, and only then internationally, or the other way around. But, I am not without a sort of answer to the question. That is, order doesn't (even shouldn't) count, insofar as we are preoccupied with what to teach and study. The preoccupation with curriculum will help obscure, rather than clarify, the task that lies ahead. The important thing in higher education for some time to come will be to see how something can be taught and learned well within a broader context or from a fresh perspective, a task that requires joint efforts on the part of a variety of scholars. And the apparently audacious proposals in this essay, I hope, open up one of the various ways for such learning experiences as the substance of globally-oriented higher education in the near future.

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PROMISES OF, BARRIERS TO, AND ADMINISTRATIVE STRATEGIES FOR, THE USE OF EDUCATIONAL TECHNOLOGY IN GLOBAL AND INTERNATIONAL EDUCATION

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> We are in an intense period of change. The conjunction of technological innovation, scientific discovery, and affluence has produced a period of unsettling percolation. (Herbert I. London, 1988.)

In The Third Wave Alvin Toffler engages the imagination of the reader in a flight into the future, speculating about the way that changes in the "Info-Sphere" will transform our minds, the way we organize our world, and even our own brain chemistry. He reports computer technology will enable us to think in added dimensions:

> For the computer not only will help us organize or synthesize "blips" into coherent models of reality; it also stretches the far limits of the possible. No library or file cabinet could let us think let alone think in an unorthodox fashion. The computer, by contrast, can think the "unthinkable" and the previously "unthought." It makes possible a flood of new theories, ideas, ideologies, artistic insights, technological advances, economic and political innovations that were, in the most literal sense, unthinkable and unimaginable before now. In this way it accelerates historic change. (Alvin Toffler.)

An explosive marriage has occurred between computers and telecommunications shrinking the world to a global village and transmitting technology to its far reaches. These developments will influence the future of education throughout the world, but how?

In spring of 1989, a fiber-optic network linking the world was completed. The Pacific Link Fiber-Optic Cable was the final link in the world cable connection. This cable makes possible high resolution transcription of video, graphics, and text accessible instantaneously around the entire globe. The improvement of fiber-optic video quality over satellite transmission will create new possibilities for extension to classroom use throughout the world. Moreover, a second cable, the North Pacific Cable, will be laid by Pacific Telecom Cable of Vancouver, Washington, International Digital Communications

Inc. of Japan and Cable Wireless of Britain in the near future increasing the capacity for cable transmissions.

With the incorporation of these new technologies some persons predict the disappearance of the school building. "Walls (state, regional, and national boundaries) are becoming increasingly irrelevant as the technology of telecommunications is incorporated into the educational process." (Lewis, 1988). Others predict of the disappearance of schools in their present form and the rise of a voucher system which will allow people to purchase educational services and resources from a variety of worldwide entities. Some futurists view the future school separated into a multitude of decentralized units all connected electronically to a centralized unit and capable of interactivity. Others predict very little change with the teacher remaining as the nurturer, knowledge dispenser, and central figure in the classroom and the learning process while occasionally making use of educational technology.

Summarily, two extreme views of the influence of educational technology on education are present: one prophesying the disappearance of schools and the need for teachers while the world becomes a classroom through the wings of educational technology; and the other, little change in traditional education except for the add-on of a few uses of new machine technologies.

Inevitably the future involves change. It is naive to view the changes as only one of the two extremes; more likely it will be a mixture of both. What will be the direction-of-travel? How can it be orchestrated and administered strategically? Our inquiry will proceed as follows:

1. First we will outline some assumptions and definitions;
2. Second we will examine the promise of educational technology;
3. Third we will examine its potential contribution to global and international education;
4. Then we will examine some of the problems and resistant forces that face educational administrators, policy makers, and champions of educational technology in its international use; and
5. Finally we will suggest a strategy for the introduction, utilization and management of educational technology.

1. DEFINITIONS AND ASSUMPTIONS:

The definition of educational technology: the application of pure science (basic research from any discipline) to the field of education to produce new or innovative changes in the products, supporting activities and services" and Bereano (1976) would add "within a sociopolitical context." New educational technology both expedites and produces educational change. The assumptions of this inquiry is that some change is inevitable and that it always takes place in a sociopolitical context. (See Figure 1.)

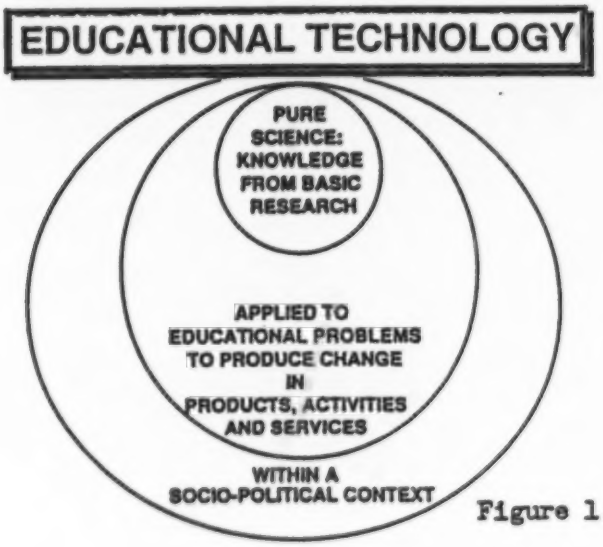
EDUCATIONAL TECHNOLOGY
PURE SCIENCE: KNOWLEDGE FROM BASIC RESEARCH
APPLIED TO EDUCATIONAL PROBLEMS TO PRODUCE CHANGE IN PRODUCTS, ACTIVITIES AND SERVICES
WITHIN A SOCIO-POLITICAL CONTEXT

Figure 1.

How those changes are made can make a difference between social and economic disaster and healthy, vital, vigorous results. Knowing both the promises and the barriers to the use of and misconceptions towards educational technology in an international setting can contribute to the choice of appropriate implementation strategies. The nature of this change is not assumed to be just an add-on of machines (hardware) to traditional education. This view ignores the instruction, information science, systems design and interactive T.V. with the trunk of the tree being instructional design. (See Figure 2.)

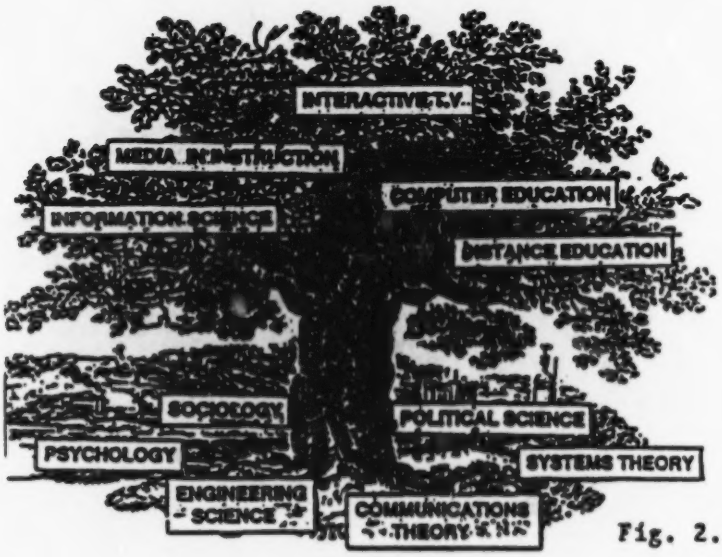

Fig. 2.

Winn (1988) uses a metaphor which shows educational technology as a hub around which everything else evolves. Computer education, distance education, media in instruction, instructional design and interactive T.V. make up a secondary ring and the fields of military science, psychology, education, library information science, communications, engineering, and business and industry make up a tertiary ring. (See Figure 3.)

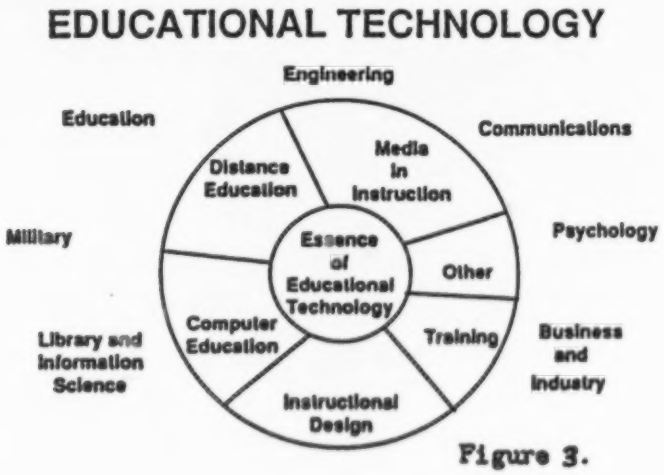

Figure 3.

Both of these metaphors contribute to our understanding of the origins and fields of application of educational technology.

Global and International Education: These terms will be used interchangeably; however, global education implies looking at the world as a series of interdependent entities emphasizing the whole; whereas international education implies studying the specific cultures and comparing them to learn of similarities and differences between them.

The assumption is that the purpose of global and international education is:

(a) Developing an international/global perspective,
(b) Gaining cultural knowledge and understanding,
(c) Cultivating an international sensitivity and relational ability, and
(d) Studying development and cultural change. (See Figure 4.)

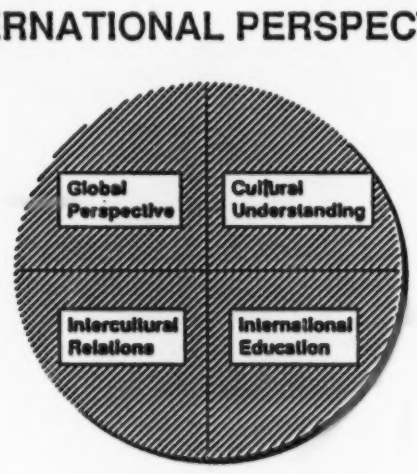

Figure 4.

These purposes are similar to those identified by Kobus (1983) and Hughes-Wiener (1988). We need persons who are aware of themselves as culturally conditioned persons, are alert to differences in perceptions between self and others, are aware of their own social needs and those of others, and are willing to adapt and to communicate with other cultures.

Goodenough (1976), the anthropologist, says that multiculturalism is a normal human experience. Furthermore, ones effectiveness is influenced by his/her competence in interacting with a variety of micro and macro cultures.

"No man can be a true critic or connoisseur without universality of mind, without flexibility which enables him by renouncing all personal predilections and blind habits to adapt himself to the peculiarities of other ages and nations." (Lord Briggs.)

Hughes-Wiener (1988) in an analysis of international education discussed three divisions of international education:

(a) Focused courses which studied specific cultures or specific international topics,

(b) Internationalization of all areas of the curriculum, and

(c) Internationalization of other components such as methods, materials, extracurricular activities and applied areas of education. (See Figure 5.)

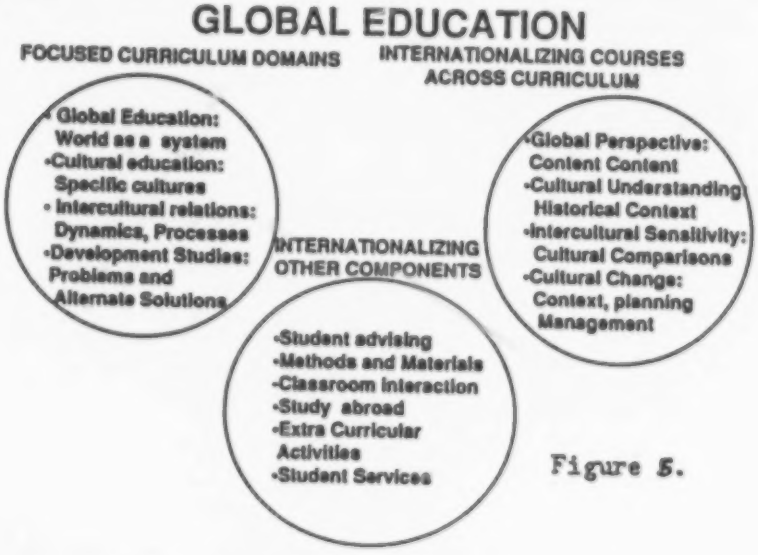

Figure 5.

When the purposes of international education are combined in a matrix with each of the three divisions of international education the results embellish our understanding of international education. Focused courses either view the world as a system, study specific cultures, intercultural relations, or developmental studies. When internationalizing all the courses across the curriculum courses should reflect a global perspective on the topic, include cultural understanding of it from a historical context, comparisons with other cultural perspectives, and an examination of cultural change. Internationalizing other educational components involves adapting teaching methods and materials, classroom interaction, style of student advising and planning study opportunities, extracurricular events, and student services to include international dimensions.

2. THE PROMISES OF EDUCATIONAL TECHNOLOGY:

The allure of educational technology for teachers and administrators is like a multifaceted diamond. It can:

(a) Collect, organize, store, compute and transmit data quickly,
(b) Provide resources for individualization of teaching and the curriculum,
(c) Increase thinking capacity,
(d) Extend learning,
(e) Access great quantities of information,
(f) Facilitate information exchange, and
(g) Save money.

DATA COLLECTION, ORGANIZATION, STORAGE, COMPUTATION AND TRANSMISSION: Application of computer software designed to collect, process, tabulate and evaluate data can save time for hassled administrators and overburdened teachers. Statistical computations which the software can provide will give them new amounts and types of previously unavailable information to improve the quality of their decision-making and provide feedback on decisions.

INDIVIDUALIZATION: There is an increasing growth in the variation of learning abilities, social classes, ethnic groups, and the mainstreaming of special education students. In view of this diversity, various software, video, audio, and interactive programs for instruction and learning can provide the teacher and the learner with a greater capacity for varying the speed of learning, the level of learning the cultural perspective, and the method or style of learning. "The integration of full-motion interactive video, compact-disk-quality sound, voice recognition, touch screens, writing tablets with electronic pencils, high resolution color images and other natural interfaces will transform not only the computer as we know it but the teaching process as well." (Lewis, 1988.)

INCREASING THINKING CAPACITY: Educational technology is called the "cognitive enhancer" (Foster, p. 11). Through the use of hypertext and hypermedia software programs, for instance, students independently find and use materials to supplement learning. Hypertext can be used to set up sub-programs of nonsequential reading and writing. A hypertext system allows users to link information together, thereby creating trails through associated materials. A link connects words or sentences in one electronic document to related

information in another such document. Hypermedia, similar software, allows users to link to nontextual media, such as graphics, video, spreadsheets, animations and voice (Smith, 1988).

Through Windows one can increase the "visual scope," the degree to which a user is able to integrate information across a display of multiple windows or screens on one screen and grasp the whole of whatever is being displayed (Norman, Weldon, and Shneiderman, 1986). Overlapping top-bottom and right-left surface window layouts are available thus expanding the information on one screen.

Each window can scroll independently or in synchronization and can input and output data, reduce data, and make projections. Cognitive layouts, designed to direct the type of mental connections made between screens, include linear sequencing (i.e., from simple to specific and vice versa), selective attention, varying levels of processing (i.e., from simple to complex), memory storage layout, zoom-in zoom-out layout, and perspectives layouts (Norman et al, 1986). These allow one to compare/contrast information in different segments of the same screen. Multiple windows may increase the number of cognitive dimensions available to the mind at one time.

EXTEND LEARNING: The personal computer provides increased capacity to process and evaluate data, to visualize models from a variety of perspectives, or to synthesize points of view. Today some desktop personal computers are more powerful than the room-sized mainframes of a dozen years ago. Computer speed is measured in the millions of instructions per second (Lewis, 1988). Students can test decisions with realistic results, simulating economic models, simulating production models, simulate ethical or socio-political models, and even models of change (Lewis, 1988). These can be useful for development education. Microworlds is an example of a software program that can be used to create and to explore artificial realities and their effects (Dede, 1987).

In addition, the computer can perform statistical computations which before were virtually impossible in terms of time, effort, and memory.

INCREASED INFORMATION ACCESS: Students, teachers and administrators at all levels can have access to greater amounts of information. They will soon be able to access almost any library in the world and purchase information from a variety of national and international data bases, information banks, and think tanks. One of the areas which needs work are legal codes and common operating systems to facilitate international information exchange. According

to Cleveland (1988) we need to rethink governance based on secrecy and laws based on ownership. What does copyright mean? Who controls the access to information? What should be done about censorship?

"The computer will give the student the ability to relate disparate pieces of information and learning experiences, bringing together film clips, class notes, research papers and other different facts in an automated way at the student's fingertips." (Lewis, 1988). This will allow for the introduction of new cultural perspectives.

INFORMATION EXCHANGE: In addition, one can participate in information exchanges across the state, nation, and the globe instantaneously through distance education, electronic mail or interactive video. Since we are living in a global village, educational technology has the capacity to enable us to become multi-national persons.

Education, therefore, is no longer confined to the classroom nor to a building, but it can be disseminated to the home, the business or the factory in a variety of modes through cassettes and to distance learning using audio, audiovideo or interactive distance T.V. This has potential for providing for training used as a basis for further economic development and the transfer of new technologies to the workplace.

COST-BENEFIT: Educational technologies hold the promise of becoming cost-efficient by saving travel and personnel time, reaching larger numbers of students, and providing a wide variety of materials and approaches that can deepen learning if they are used effectively. Telecommunications can reduce the cost of extending access when the requirement for construction is reduced, when a course can be offered simultaneously at multiple sites, and when the requirement for faculty travel is reduced (Crossland, 1988).

Production and start-up costs are often staggering and must be amortized over long periods of time for numerous students and personnel if they are to be rendered cost-efficient. Cost efficiency often has a subjective component and should include a value for providing students with technological literacy needed for future responsibilities and with a richer depth of knowledge. A lesson we need to learn is that technology is not standing still and thus requires a policy of constant investment and reinvestment in hardware provision and replacement, in software development, and on teacher retraining. International cooperation in software production, and in research and

production of advanced machines would free up funds for teacher retraining (Rhys, 1988).

3. EDUCATIONAL TECHNOLOGY'S CONTRIBUTION TO INTERNATIONAL EDUCATION:

If we take the view that education is a conversation with the world aimed at understanding it (Kneller), we will have the opportunity for increased communication and potential understanding of the world, its cultures, and appreciation of its interdependence. Within that framework there is a tendency for a disappearance in the dividing line between domestic and national affairs. International affairs will predominate the domestic affairs of other nations and domestic politics have international impact and implications. Although information cannot be monopolized, delivery systems can (Cleveland, 1988). The recent Chinese student riots demonstrated these dynamics.

Thus it is far easier to put learning in an international context and to internationalize education. Teaching critical thinking will be increasingly important. We need to help students recognize "snarl" and "purr" words used to dramatize news events and to spread propaganda.

Countries will be able to introduce technological innovations, mechanizations, and training programs to accompany mechanization through the availability of flexible educational delivery systems afforded by educational technology. These same delivery systems can be used in the development of literacy and economic development programs in third world nations. Increased opportunities for collaborative international research and exchange will be facilitated by telecommunications.

Already we have seen the development of international branch campuses where a college or university in the United States enters into a business partnership with a private corporation to provide education in English in another country. Southern Illinois University and Temple University have started branch campuses in Japan and Edmonds Community College and Stanford University plan to do so next year. These campuses will also be educating American students in Japanese and Japanese culture. Much of the business of the branch campuses will be transacted via telecommunication and some of the courses will be taught using educational technology as the delivery system.

4. BARRIERS TO THE USE OF EDUCATIONAL TECHNOLOGY:

The Idea Matrix: A Guide to the Implementation of Research (Borton and Cope, 1987) will be used to examine the relationship of educational technology and society. (See Figure 6). Each of four dimensions: Structure, Resources, Culture, and Systems as a framework for organizing our inquiry. The dimension Structure includes the roles, organization, and policies/procedures as components. Into this structure is poured the dimension Resources which include people, capital, technology, buildings and equipment as components. As these interact with each other they develop a dimension Culture and a history which expresses itself in values, attitudes and beliefs. When these become formalized and objectified they are developed into the dimension Systems which control, provide guidance for and perpetuate the system. These include legal systems, data processing systems, reward systems and governance systems. (See Figure 6).

THE IDEA MATRIX: A GUIDE TO IMPLEMENTATION RESEARCH

	Idea	Implementation	Impact
STRUCTURE Roles Structure Formal Informal			
RESOURCES People Capital Technology Buildings Equipment			
CULTURE Heroes/Stories Beliefs Attitudes Expectations Behavior/Emotion			
SYSTEMS Control Information Reward Funding			

(Borton, Cope/87)

Figure 6.

STRUCTURE: Teachers are usually the central figure in the classroom. In most traditional classrooms they serve as "imparters of knowledge" and as "intuitive nurturers," a support for learning. Teachers' interest in constructing curriculum themselves or developing alternative instructional materials is severely constrained by a lack of time for anything other than the most basic classroom maintenance (Kerr, 1989). They have a demand for "the practical" in approaches, materials, or hardware. Moreover, textbooks usually have already been selected.

Most teachers are not trained to use paraprofessionals nor are these aides available in large quantities. Usually teachers are in a self-contained classroom where there is a definite schedule to follow for classes and for learning.

The library usually houses books, not software, instructional videos and videodisks. The traditional librarian is not an educational technologist or media specialist. Outside agencies such as industries, museums, and radio and television broadcasting only play a very small part in education.

Many times victimized teachers view the implementation of educational technology as a top-down administration initiative. They feel pressure to comply at least minimally, but not with a spirit of enthusiasm.

RESOURCES: Schools often experience a deficiency of resources. The up-front costs of hardware and hardware systems are exorbitant considering that 80% of most education budgets are spent for salaries.

Software is limited because education has responded slowly to its use and does not have have the time for development. Commercial producers and publishing houses have not taken the educational market seriously, except in the case of textbooks. Beyond that, if a school produces software or interactive video on its own, the costs in time, money and outside consultants seem excessive in comparison to most curriculum developments.

Usually faculty are not prepared with even basic knowledge of educational technology and they lack the preparation and experience to use it effectively or to envision its use even when faculty development and supportive professional experts are available to assist. In most situations, however, a lack of technical support exists. The assumption is often that teachers find technology easy to use, that technology readily fits into the context of

classroom activities, and that instruction should become a rational science (Kerr, 1989); however, teachers often are awkward about using technology and adapting it for classroom use.

Equitable access to information, data bases, and software is problematic. It costs money and this separates the districts that have from those that have not.

CULTURE: "Discovery learning and new technology are on a collision course with traditional education. Education at large has changed and with it the educational philosopher and methodologists, but pedagogy has not" (Cohen, 1987). People still highly value the written word. Teaching is seen as telling, and the teacher's voice is the voice of authority (Gallegos, 1984).

Beginning teachers are socialized by professional teachers where they are employed (Cohen, 1987). "The teacher's world is substantially limited by powerful social and administrative pressures to teach in particular ways." (Kerr, 1989; Cuban, 1986; Cohen, 1987).

Parents' views of teaching are largely based upon their own past experiences of schooling. Less value is placed on knowledge that is transmitted by non-human means and its useful value is questioned (Gallegos, 1984). Technology and mechanization are viewed as a dehumanizing process and produce terror in some who feel either their lives will be controlled by machines or they will have to become like a machine. Yet, if technology is used productively, it ought to enhance humanness and attention to the individual. One of Nesbitt's megatrends is that the world will be high touch, high technology.

According to Laird (1988) teaching is thought of as a "women's profession." The teaching salary is devalued, the number of women in the profession is high, the nurturing, intuitive, emotional roles of a teacher are predominant in teaching, and the intelligent women are devalued. Perhaps from a critical perspective, women are more hesitant to learn mechanical, technological skills than men who are thought to be more mechanical, rational, cold, firm, and aggressive. Perhaps there is a need to build new metaphors for education that include both the male and the female and view education as both an art and a science.

SYSTEMS: Because of traditional attitudes towards education, faculty are not rewarded for using or developing educational technology. At universities faculty are rewarded for publishing articles, not for producing software products (Hershfield, 1981). Unless the reward system is altered, it is unlikely that increased production will result.

Legal systems and legislative policies often do not lend themselves to educational technology utilization, particularly when the state specifies the student/teacher ratio, the necessity of having a certificated teacher in the classroom at all times, the teaching schedule and school calendar, and the required use of the lock step grading system (Duttweiler, 1988). These policies do not facilitate the use of paraprofessionals, individualization of learning speeds and levels, and flexible scheduling.

Because of the increasing politicization of education (Spitzer, 1987), greater accountability is being imposed. Educational technology empowers accountability levels. Legislators are engrossed in assuring voters of the cost-efficiency of education and are interested in short-term results that will impress voters. Administrators need to become sophisticated in economics and cost/benefit analysis, its subjectivity depending upon the perspectives from which costs and benefits are figured, and to be able to participate in the political discourse adeptly. Accountability systems in the classroom involve questions of privacy of information. Student information regarding rate of learning, thinking processes and behavior can be kept centrally and may follow a student cumulatively.

There are some external socioeconomic systems that raise barriers as well. They involve the differentiation of access to educational technology and to information by the haves and the have nots (McDonnald, 1988), the developed nations and the developing nations (Cleveland, 1985). How can social justice and equal opportunity for all be achieved in information access? We must know what type of world we want to create and how to balance it with nationalism and internationalism.

This situation looks depressing; and there are several great walls to scale. The purpose of this journey into depressing reality is to give new dimensions for considerations for planning solutions. Next we shall revisit Structure, Resources, Culture, and Systems with new views through glasses of possibility. This document is not meant to be a comprehensive plan, but merely an inquiry into the potential nature of the implementation process.

5. STRATEGY FOR THE UTILIZATION OF EDUCATIONAL TECHNOLOGY:

"Technological capabilities must be matched with appropriate human capabilities. If much technology is being transferred and quickly, the needed changes in human capabilities will have to match or anticipate the rate of technological transfer. Thus, if we are to improve the transfer of technology, we must find the best approach to the preparation of the people involved" (Meals, 1979-80).

STRUCTURE REVISITED: Teacher preparation and professional development activities can focus upon creating new roles for the teacher and the student in a student centered classroom. It might discuss how to empower students to take charge of their own learning or how a teacher can become a nurturing coach. Good examples of application of educational technology in state or local school organizations can be highlighted in showcase workshops sponsored by local school districts which feature state, national or international program development activities. A program of resocialization can be introduced through small group discussions about what a shift in teacher and student roles would mean and how such a transition would take place. By including trained paraprofessionals and technicians as participants in workshops with professionals and in the development of new structures, the probability for their use might increase. Their ready availability and publicity on the benefits of their use might result in increased use of their services.

Librarians must become trained to view themselves as media specialists. Budget allocations for hardware, software, videocassettes, and video disks would begin to augment the transformation of the library to an electronic media center. The librarian could be encouraged to become knowledgeable of media available through industry, museums, and radio and television broadcasting; as well as the agent for sharing information between entities and exploring the possibilities of collaboration. Librarians should be given more importance and visibility and a greater role in disseminating this information to the faculty. Their status will grow in our information society.

Changes in roles or structures are a function of ownership and commitment. Plans which are made and initiated by the faculty have a greater commitment and therefore potential for greater impact than those imposed by management. Management can provide exposure, raise the level of awareness and embellish any request made for use of technology by students, the public, and especially teachers.

Greater latitude in class schedules, textbook selection and curriculum matters and availability of technical support teams will help to structure the environment to support change. Educational technology needs "champions" and "early adopters." These roles can be identified, encouraged, and assisted.

There is growing evidence that a number of students have adapted to computers; and that business and industry as well as many parents are pushing for computer instruction in the classroom. They are concerned that their child becomes computer literate. Children often have positive involvements with computers and videos because of computer video games; and there is potential for a wise teacher to build upon this involvement.

RESOURCES REVISITED: Industry, the military establishment, and businesses are markets for and possessors of educational technology. Schools experiencing a deficiency of funds must look externally to business/industrial and governmental/military partnerships, foundations, and other grant funding.

Legislation could be sought to fund R&D centers for educational technology within a state or region. Most factories have R&D budgets; ordinarily, schools do not (Hershfield, 1981). If such centers were developed their charge could be to develop new software, hardware, and applications for existing technology. They could serve as a consulting extension agent for local schools and conduct implementation research in partnership with local schools and the university to further the science of educational technology. Such a center would consist of computer engineers, cognitive psychologists, educational technologists, designers, psychologists and researchers. These entities might even serve as incubators for the entrepreneurial development of commercial educational software or video disk products. (See Figure 7.) This exhibit suggests other ways in which technology can be transferred which include internships, direct education, centers for excellence, and electronic networks.

Legislation can be encouraged to work out problems regarding equitable dissemination of information resources, copyright laws and rights to access and censorship for appropriate age and developmental levels of students and clientele groups (McDonnald, 1988). Task forces of librarians and teachers can be working locally to give input to formative recommendations to policy makers regarding access to information.

TECHNOLOGY TRANSFER MECHANISMS

RISK	OPTIONS	INVESTMENT
Low	-The graduate student -Internship -Publications -Conferences -Direct Education	Passive
	-Consulting -Industry Affiliate Programs -Technology Transfer -Patents and Marketing	Active
Medium	-Venture Capital Funds -Technology Licensing -Joint R&D -Technology Centers -Centers for Excellence -Research Institutes	Partnership
High	-Technical Assistance -Extension Programs -Electronic Networks -Incubators -Technological Parks -Science Cities	Vested

Figure 7.

Further collaboration is needed between universities and local school districts in shaping information, producing and utilizing programs, information and learning experiences, and conducting research. These measures can add momentum and eliminate the need for duplication.

CULTURE REVISITED: A change in culture involves a change in the metaphors, symbolic language, and slogans used to structure our thought process and communication. A major effort needs to be undertaken rethinking the teaching and learning process and investing it with new embedded metaphors, slogans, and principles that reflect its values. This may involve connecting with existing values: for instance, creating expressions about "educational technology's enhancement of humanness," or its "freeing the teacher to be a nurturing coach 'caring but tough'" or "empowering students to organize their own learning and to use computer-assisted assessment." The development of symbolic language, metaphors. beliefs and values, expectations, heroes and stories would all contribute to a new "mythological" tradition. Any such tradition must connect with both faculty conservatism and the liberalism of educational technological reformers to gain support for the argument. In other words, it must start with the cocoon of current practice and move toward spreading its wings in a new liberation of flight into the future.

SYSTEMS REVISITED: Reward systems must be changed if faculty are to be induced to new behaviors. At universities, faculties should be rewarded for the production of software and interactive video disks as they are for publishing. In schools, teachers need to be rewarded with both material and non-material benefits. The legal system must be changed so that policies will not hinder the use of educational technology. Requirements such as having teachers in the classroom at all times and lock step grading should be removed. New policies that facilitate the use of paraprofessionals, educational technologists and designers and the implementation of flexible scheduling should be used. Finding funding for interdistrict cooperative R&D should be made available. Dissemination systems on the local, state and national level are capable of bringing publicity to innovative uses or developments in educational technology. Evaluation systems for software and for the use of educational technology will facilitate the dissemination and use of these educational products by others.

Governance policies in the local school districts may need reworking as well. Policy should be developed regarding privacy, copyrights, and access to information (whether it is by adult or child, national or international). Educators need to develop sophisticated knowledge about potential cost-benefits of educational technologies considering professional time, money, quality of learning and usage of these materials.

THE BEGINNING AND THE END: Perhaps a place for educational technologists to begin is to carve out market niches on the margins of education in continuing education, informal self-help education and in collaborations with business, industry, and the military, museums, and broadcasting companies until the momentum for the adoption of educational technology increases. Policy development that anticipates the future in a timely and appropriate manner will be like fuel to accelerate the movement if and when it does take hold.

ACTION PLAN:

1. Teachers must develop new role models to follow and be socialized to alter or change their roles and restructure their culture. Trained technicians and paraprofessionals should be an important part of the structure.

2. Libraries should be developed as multimedia centers and international electronic networks.

3. A strong professional development program and professional support system should be maintained.

4. Worldwide and national policies for equitable access to information networks and data bases should be developed.

5. New models of pedagogy need to be developed based on the use of educational technology.

6. A new reward system to encourage the development of software products is needed.

7. Legal codes need to be worked out to facilitate the exchange of information and the use of technology.

8. Acknowledgement of the expense in continual upgrading and updating electronic equipment, software, and personnel needs to occur.

9. Partnerships with business and industry should be sought.

10. R&D centers and incubators for the development of educational software need to be developed.

Educational technology is headed somewhere between the ideas of the traditional educator and the educational technologist's view of the disappearance of school in its present form. We need to anticipate the future and strategically plan for it.

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COMPUTER COMMUNICATIONS FOR INTERNATIONAL EDUCATION: THE FUTURE OF TEACHING IN THE PLANETARY CLASSROOM[1]

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Abstract

Advanced technology makes possible two overlapping changes in education: (1) space/time independence, and (2) automation. Space/time independence contributes to the internationalization of the curriculum, effective interaction in distance learning, and individualized instruction. These consequences will alter the teaching role in secondary but significant ways. Automation employs similar technological means to replace teachers with machines, removing teaching from its central role in education to a peripheral or supportive role on the model of industrial deskilling of craft labor. Which type of change is furthered by computer mediated communication (CMC)? Three examples, drawn from three different levels and types of education, illustrate the thesis that CMC supports space/time independence but not automation.

Educational Applications of Computer Mediated Communication (CMC)

Futurists expect modern media of communication to transform education. Television, combined with computer assisted instruction (CAI) and CMC will narrow the gap between schooling and the real world, overthrow pre-established curricula and generalize individualized learning. Teaching will no longer be the mechanical inculcation of facts but instead will coordinate students' self-directed learning activities (Martin, 1981: 177-192; Nora and Minc, 1978: 58-59).

Actual experience with advanced educational technologies confirms some of these predictions. In addition to enriching the conventional curriculum, the new media break down the traditional space/time coordinates of the classroom, with three major consequences for the structure of education: (1) education need no longer consist in the transmission of a specific local culture but can be international in scope; (2) education need no longer be localized in time to coincide with childhood but can continue throughout the lifespan; (3) education can be less group centered and more responsive to individual differences in learning style and rate.

This last change depends on the use of new technologies of individualized instruction, such as CAI. These make possible both "learner centered" education, in which teachers tailor instruction to individual needs, and also fully automated instructional programs delivered primarily by machines rather by teachers. Automation has additional implications of all sorts for the teaching profession, costs of education and so on.

There are two different types of predictions here that appeal to different groups for different reasons. Teachers place the emphasis on space/time independence because they see their job as the discovery of the new pedagogical potential of mediated education. But, in the public mind, it is automation, with its promise of drastic cost reductions, that is generally identified with technological advance in education.[2]

Can new media replace teachers? This idea gains plausibility from the example of deskilling through industrial automation. Just as skilled machinists are replaced by computerized techniques of numerical control, so will skilled teachers be replaced by computerized educational tools (Noble, 1979; Zuboff, 1988). As the knowledge involved in teaching is effectively transferred to electronic helpers, the demand for human teaching skills will fall. So close is the parallel with industrial automation that educators opposed to outfitting schools with new technology are sometimes compared with "Luddites."

But so far new technologies have not fundamentally altered the position of the teacher in the educational system. Teachers use videotapes and CAI programs much as they might use laboratory experiments or exercises in textbooks. The educational institutions and professions appear to have reproduced themselves despite the apparently revolutionary implications of the new technologies. (For a review of current trends, see Balestri et al., 1988).

Will CMC change the picture? The analysis presented here explains why CMC cannot automate education. Unlike computer assisted instruction, CMC does not replace teachers but provides an alternative way for them to meet with students. CMC is not depersonalized; on the contrary, because all communication takes place in natural language, personalities come through clearly. In its application to video and correspondence courses, networking puts an end to one-way broadcasting and opens up reciprocal lines of communication between students and teachers. With computer conferencing, all

the students in the class see each others' comments and ideas. A feeling of group membership develops and students frequently learn as much from each other as from the teacher.

There are compelling reasons why CMC will actually strengthen the teachers' role in advanced educational delivery systems. Computer networking is an artificial communication system which confronts users with an unfamiliar and largely uncoded "space" of communication. On-line communities experience an overwhelming need to normalize the exotic computer environment by inventing a public world adapted to their needs. The process of invention is given over by default to the organizers of the on-line discussion, in the case of education, to teachers, whose traditional leadership role is reproduced in new ways in an imaginary or "virtual" classroom with familiar signposts students use to orient themselves (Feenberg, 1987).

CMC thus does not contribute to automation, but to the growing space/time independence of education. This general conclusion is confirmed by the case histories presented below.

The Planetary Classroom

All teachers appreciate the pedagogical opportunities afforded by the presence of even a single foreign student in the classroom. At the very least the student will contribute to enlivening the geography curriculum; an articulate visitor may enhance classroom discussion on many subjects, aiding the other students to overcome ethnocentric prejudices.

The interest and importance of these objective is obvious but only rarely can teachers achieve them. What would it be like, then, to be able to offer all students daily access to comrades in foreign countries? Today, this astonishing proposal is technically feasible using CMC, and it is rapidly becoming affordable for ordinary schools and universities.

In 1983 several experiments in networking classrooms around the world were initiated by researchers at the University of California, San Diego. According to these researchers, networking is not in itself an educational activity, but rather a tool to be employed by teachers to enhance the traditional curriculum in such areas of writing and geography. The experiments were designed to aid in the invention of pedagogical practices that take full advantage of the new medium.

In one experiment, classrooms in San Diego and Madrid were networked in a program that grew to include schools in Puerto Rico, Tucson and New York City. The Spanish students who came from middle class backgrounds were enrolled in a conventional English class. The American children were poor Mexicans or children of Mexican origin, bilingual in English and Spanish but with mediocre language skills in both languages. One easily imagines the intriguing mutual exploration possible in a network bringing together children with such a mix of backgrounds and abilities (Rosa and Moll, 1985).

The students produced a magazine together using electronic mail for communications. To enliven the proceedings, they exchanged photographs of themselves and their cities at the beginning of the experiment. The students were invited to select themes relevant to the history and geography curriculum and to form pairs to work together on texts in their principal language, Spanish for the Madrilenos, English for the Mexicans. Each pair presented a text for translation to a corresponding pair working in the other language and eventually a bilingual publication was issued in both locations.

This project aimed at enhancing language ability, writing and knowledge of geography by bringing the subjects alive through personal contacts with foreign students. The network supplied information, a tool for checking and improving the translations, and an audience for the knowledge each student could demonstrate by writing about familiar local matters.

At about the same time, another network was set up which eventually came to link secondary school classrooms in San Diego, Juneau (Alaska), Jerusalem, Tokyo, Urbana, Hana (Hawaii), New Haven, San Juan, Tijuana and Mexico City. The children engage in many different types of joint activities and operate a "wire service" called the "Computer Chronicles" which they use to publish local "newspapers" in their schools (Riel, 1986; Cohen and Miyake, 1986).

Here are examples of activities pursued on the network:

- One teacher proposed a study of cultural differences and similarities through comparing proverbs. Each participating classroom collected as many proverbs as it could from family and friends and to put them on the network.

- Japanese students, preoccupied by a wave of student bullyings and suicides, initiated a discussion of these problems on the network.

- Students in schools in San Diego and Tijuana discussed the social problems resulting from the millions of illegal crossings that occur on the border between the two cities each year.

Although students are generally bored by conventional social studies, lively discussions of social issues such as these are among their most exciting scholastic experiences. International networking in the planetary classroom prepares students for a lifetime of cosmopolitan interactions and introduces them early to the computer as a powerful means of communication.

Electronic Delivery of Continuing Education

In January of 1982 the Western Behavioral Sciences Institute (WBSI) opened a CMC based school to deliver continuing education to executives at their homes and workplaces.[3] The WBSI program is staffed by prominent university faculty and business leaders who teach month-long segments over an international computer network. Each six month term begins with a residential seminar in La Jolla at which the participants meet the faculty and learn to use their computers. Then the students return home for six months on on-line interaction before coming back again to La Jolla for another seminar (Rowan, 1986: 71-74).

The WBSI network is composed of a mix of business executives, military officers, scientific researchers and administrators and scholarship participants from the public sector. Their off-line activities may be very different but all of them enjoy intellectual interchange with each other and the faculty. With CMC, it is possible for busy participants to learn while continuing their careers. Using a laptop computer, participants can even stay connected with the group while traveling and enrich the discussion with reports from remote parts of the world. Foreign members of the group participate in discussions side by side with Americans without the pressures and confusion that might attend a brief face-to-face session.

Extensive experience with on-line seminars at WBSI has yielded many pedagogical lessons, a few of which are described briefly below to give a concrete idea of the experience of teaching in the electronic classroom.

The WBSI faculty learned quickly that conferencing participants are uncomfortable unless they can act as if they were substituting writing for speech in some more familiar type of interaction. They must treat the conference as a "meeting," a "discussion group," even a "cocktail party" in

order to establish shared expectations. Without such reassuring signposts they are fearful of writing the wrong thing and withdraw into the perfect silence of a blank screen. With this in mind, faculty imposed a framework of norms and expectations modelled on an ordinary college seminar.

To reproduce the seminar environment, one needs on-line equivalents for such things as opening the discussion with a short orientation session, calling on individuals to speak, assigning work to be delivered in class, getting a sense of the group's wishes, and distributing short readings for discussion and comment.

CMC courses are necessarily based on "classroom" discussion since students quickly lose interest in lengthy on-line lectures that would be more appropriately printed and distributed by mail. The participants and the teacher input relatively short texts of no more than a page or two, asking questions, responding, commenting on the subject at hand. The WBSI seminars frequently collect 100 to 200 such texts in the course of a month.

As in a regular classroom, the teacher is responsible for provoking and leading discussion. Accordingly, he or she must design an agenda and supply a comment every few days for the purpose of moving the discussion along. Since material is deposited in the conference asynchronously, several different topics are usually under discussion at the same time. To give the group a sense of orientation and accomplishment amidst the sometimes confusing flow of text, the teacher should offer frequent summary comments, called "weaving comments."

Students may become discouraged when their messages get no response. To prevent this from occurring, the teacher must respond to every otherwise unanswered message. It is also helpful to send private messages to students who have been "absent" for an unusually long time.

Lessons like these form the "lore" of the WBSI School, passed down from one group of teachers to the next. Any institution which introduces CMC as an educational medium should develop such a base of practical knowledge among its faculty.

The WBSI School of Management and Strategic Studies is a pathbreaking application of a new delivery system to continuing education. It demonstrates the usefulness of CMC in crossing the barrier between school and work.

Deindustrializing Distance Education

It is estimated that some 10 million students around the world are enrolled in degree granting distance learning programs. This is an enormous educational "market" that is peculiarly dependent on technology to mediate exchanges between students, teachers and the sponsoring institution.

One of the most successful of these distance learning centers is the British Open University (OU). With over 80,000 students and 5,000 tutors, the OU is a significant factor in British higher education. The OU model replaces the conventional labor intensive educational system, which relies on teaching skills, with a capital intensive alternative designed by a few experts for remote delivery under the loose supervision of less skilled tutors. This "industrial" educational model achieves economies of scale in course production and reduces labor costs in delivery (Peters, 1983; Henri and Kaye, 1985).

Communication media naturally play a large role in this system. The OU prints up tailor-made textbooks for its students in one of the largest publishing operations in England. OU courses make extensive use of video resources; computers are the latest technology to be integrated to the learning system.

In 1988, the Open University inaugurated its first application of computer conferencing to distance learning. The context was a new course on Information Technology, offered to a first "class" of over 1,300 students. Sixty-five part-time tutors were hired to deliver the course. Computer conferencing was included both as an example of a computer application and as a communication medium available throughout the term of the course.

CMC was not introduced into the OU system to change it fundamentally, but was intended to palliate some of the problems typically experienced by students and tutors in distance learning programs, such as isolation, slow communications and high rates of failure. The course designers did not fully commit to conferencing as a major medium of course delivery. They hedged their bets by making most uses of conferencing voluntary, and they came nowhere close to funding tutors at realistic levels in terms of the requirements of educational conferencing identified in programs such as the WBSI one.

This makes the results all the more interesting. A substantial minority of tutors and students devoted far more time to conferencing than was required by the course design or funded by the University. Several conferences grew quite large and proved very valuable to those who participated in them. There was a great deal of interaction among students, and certain tutors enhanced their own role by using the conferencing system to initiate something a bit more like classroom teaching than is customary at the OU. The "industrial" model was most sharply challenged by students and tutors sending direct messages to the course designers (who were also on the conferencing system) evaluating course materials, asking questions and criticizing aspects of the design (Mason, 1988.)

In the OU experiment CMC actually reduced the differences between classroom and correspondence education (Thomas, 1988). Far from deskilling the teaching profession, this application tends to subvert the only widespread model of a deskilled teaching process we have today. In doing so, it promises to transform distance learning from a disfavored stepchild of education into a full-fledged adjunct to institutional learning.

Conclusion

What conclusions can we draw from these observations? The teaching profession will undoubtedly change as it assumes the new roles and functions made possible by new technology, but this technology will do less to transform the profession of teaching than teaching will do to redefine the shape of technological advance in education. Profound changes must take place in the design and administration of educational computing and communications as the emphasis shifts away from calculation and programming toward providing an educational environment for a new type of disseminated institution.

The progress for which we should hope is a humanly richer scholastic environment, not a cheap mechanical one. The outcome will be the creation of a true learning society, based on international communication, lifetime study and intimate contact between learning and work.[4]

Footnotes

1. This article is a revised and updated version of "The Planetary Classroom," Message Handling Systems and Distributed Applications, Stefferud, Jacobsen, Schicker (eds.), North Holland Publishers, 1989.

2. The FIPSE Technology Study Group, representing a great deal of current, practical experience with the potential of new technologies, offers strategies of computerization that "contrast sharply to the more common vision of...the computer taking...an ever increasing responsibility for delivering the curriculum." They see this expectation as simply replacing "teacher-centered learning" with an equally oppressive model based on "computer-centered learning." "Such applications retain in the computer program all of the control formally exercised by the faculty. . . . Our recommendations, on the other hand, center not on the computer as a teacher, but on the computer as a tool of the learner" (Balestri et al, 1988: 30-31).

3. Apart from David Hughes' "Electronic English" course offered on The Source in 1981, there seems to have been no educational application of computer conferencing prior to the activities of the WBSI School. Occasional experimental applications of electronic mail or conferencing on the Plato system or in regular residential classes may have occurred earlier, but I have not been able to find information about such experiments. On the basis of an informal survey, I conclude the WBSI was the first institution to employ computer conferencing as the primary vehicle for delivery of an educational program.

4. For accounts of other ongoing programs, see the following items: On the Connect Ed program at the New School for Social Research, see Paul Levinson, 1987. Information on programs in Canada and Britain is available in articles by Linda Harasim, Elaine McCreary and Judith Van Duren, and Tony Kaye in the Canadian Journal of Educational Communication, vol. 16, no. 2, Spring 1987. Applications in France are discussed in Marc Guillaume, 1988. Proceedings of the Guelph symposia on computer conferencing contain much additional information on educational applications of the technology.

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PROGRESS OF HMONG STUDENTS IN WISCONSIN SCHOOLS: IMPLICATIONS FOR TEACHER EDUCATION

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The general purpose of this paper is to discuss the education of the Hmong students in America and explore some implications for improvement. More specifically, this paper will deal with educational problems indigenous to the Hmong, educational programs for the Hmong in Wisconsin and strategies for improving language acquisition. First, however, we should look at the background, language and customs of the Hmong.

Background of the Hmong

In 1930, Father Savina, a Christian missionary in China, wrote, "From time immemorial there has existed in China a race of men whose origins we do not know. Living continuously on the heights, away from all other Asiastics, these men speak a language unknown by all those who surround them and wear a special dress which is seen nowhere else." (Vang & Lewis, 1984). This description of the Hmongs suggests the mystery that surrounds these people.

The Hmong are not Chinese, Lao or Thai and their beginnings are unknown. It is speculated that during prehistoric times, the Hmong migrated from Siberia (Ranard, 1988). Many of their ancient legends "tell of a time when Hmong lived in a cold land, covered with ice and snow and where night lasted for half the year" (Vang & Lewis, 1984). Through time, they migrated to southern China and lived in peace until they were crushed by the Han Chinese. The Chinese thought of them as outsiders and barbarians because they lived in isolation and spoke a non-Chinese language.

During the 19th century they spread southward into the mountainous regions of Indochina. In Laos most lived in the northern mountain area that bordered North Vietnam. The Hmong wanted to live in peace and be neutral, but because of their geographical location and cultural compassion (which led them to help French and later American pilots shot down by communist insurgents)

they were forced to choose sides and enter the Indochinese war. The majority of the Hmongs chose the Royal Laos and American side. When the Pathet Lao gained control, the Hmong were forced to flee to refugee camps in Thailand because of the severe reprisals which followed in the wake of communist rule. The horrors of their forced migration to the refugee settlements in Thailand are recounted by University of Minnesota's Dr. Yang Dao, the first Hmong Ph.D. These memories of blood-shed and loss of loved ones continually haunt the Hmong and contribute to the deep depression endured among many.

> For days and nights, weeks and months, those families would walk. Carrying their meager bundles on their backs, they followed tiger and elephant trails, going always deeper into the great forest in order to avoid meeting other persons who, in those circumstances, could turn out to be more dangerous, more ferocious than the most terrible of wild beasts. In the course of their flight they were often attacked by Pathet Lao patrols lying in ambush for them. They did not have time to bury their dead, left to rot where they fell, nor to save their wounded, who could be finished off in most cases by an enemy who did not want to be burdened with them. Those who made their way to the Mekong crossed the river with the aid of a few bamboo stalks fastened carefully together, which they placed under their armpits to help them float. Only a third of their number, in pitiful condition, succeeded in reaching Thailand. Some turned back, following the Communist attacks, and rejoined the resistance. The rest either were killed in ambushes, drowned during the crossing of the Mekong, were taken prisoner by the Pathet Lao or simply died of hunger and fatigue. (Guskin & Goldstein, 1986).

Because of Hmong assistance in the Vietnam conflict, the United States (as well as other countries) have given them refugee status and have set up resettlement areas in various parts of the country. California has absorbed the most with Wisconsin and Minnesota second and third. (See "Ending Notes" for the rank-ordering of Hmong Population by State.)

Language

The Hmong language is a separate branch of Sino-Tibetan. It is monsyllabic and tonal (7 tones). Although the Hmong were Laotian citizens, the Laotian language is a branch of the Tai language with its source in Pali-Sanskrit. The language differences between Hmong and Lao is an important

factor in the isolation of the Hmong which reduced their opportunity for formal education. Because of these differences, and that formal education was usually given in Lao or French, present Lao refugees have and educational advantage.

It is interesting to note that the Hmong language has only recently been written. There is an oral history but no libraries. The closest to a library would be symbols woven into rugs and cloth to remind the Hmong of their past. It is only within this century that an attempt has been made to develop a written Hmong language and that has been accomplished by years of work by Christian missionaries. For the written language, they have used the most available to them, that of the Roman characters (e.g., A,B,C,...Z) with some letters included on the end of a word indicating the direction of the various 7 tones. (See Notes). This work culminated in the Hmong Version of the Bible which was finished in the 1960's.

Culture

The culture of the Hmong is a patrilinear clan system. The leadership is male and there are about 20 clans in the entire population of Hmongs. Membership in a clan is identified by a clan name, e.g., Yang, Vang, Xiong, etc. Because of the clan system, there is a strong sense of security among the Hmong. No matter how poor, or scattered in geographical distances, the rich alliances within the clan systems give the Hmong the feeling of support.

The alliances of clans are continually strengthened by Hmong rules of marriage. No Hmong can marry in his or her clan even if they are separated by thousands of miles. For example, if a couple met in California and they happened to have the clan name Vang, even if they were strangers, they would be considered to be brother and sister and, therefore, would not be able to marry. Also, when women marry, they leave their clan to go with their husband's clan and, consequently, have no inheritance from their family. For this reason, education was not considered important for women because, eventually, a woman would only benefit the husband's family, i.e., it would be considered an unprofitable investment from the point of view of the daughter's parents. Married women do visit their parents and other family members regularly with no impairment of family relationship ties, but the financial ties are broken.

Another cultural trait was that marriage was normally early, i.e., between the onset of puberty and 18 years of age. Problems are occurring in

the United States with Hmong girls getting married around 12 years old. Laws wrestle with the dilemma of trying to protect young girls and yet being sensitive to the Hmong culture. Another problem related to marriage is the custom that if a young man can successfully kidnap a woman for 3 days and 3 nights, he has earned the right to marry her. Although this was not even common in Laos, it is a valid part of their tradition. The repercussions of this custom has already found its way in the U.S. courts in numerous incidents.

Thus far we have seen that the Hmong are disadvantaged in their education because: (1) their native language was not read because it had not been written, (2) they were too geographically isolated to receive formal education, (3) there was a cultural bias against the formal education of women, and (4) early marriages made it more difficult to pursue higher education.

In addition to the above, there is the stress produced in the process of assimilating into our culture. They have been dropped, so to speak, not only into a geographically new place, but through centuries of time. Ranard (1988) states, "The most disadvantaged of the Indochinese refugee groups are the . . . Hmong, who have left their remote mountain villages of northern Laos. Like Alice falling down a rabbit hole, they have suddenly found themselves in a strange wonderland where nothing is the same. Their pre-literate society has been dropped into the age of technology."

Another example of a cultural adaptation problem is in their religious rituals. For example, in Laos it was never a problem to sacrifice an animal on a front step or bang on large kettle drums during the night, but it is not possible to continue these rituals in crowded apartment complexes in the United States. Therefore, emotional support systems used in the past are being eliminated and replaced, i.e., animism is dying out and Christianity is replacing the old ways.

There is also psychological stress from prejudice. The Hmong are sensitive people and "face-saving," politeness and cooperation are important in their culture.

Also, the stress from parent-child relations is increasing. Parental roles are becoming confused as the more educated and literate children help their less educated and illiterate parents in daily matters. Also, Hmong children observe the greater freedom of American children and tensions arise. A Hmong father from Minnesota complains that his daughter does not study enough

at home, "We don't like the idea that she go play a lot and she can be at home helping work at home . . . she'll say why this be a jail all the time?" (Guskin & Goldstein, 1986). Chue Vang, a Hmong community leader in Wisconsin, said that the freedoms that Hmong children are wanting from their parents are ". . . driving the parents crazy!"

An interesting observation was made by San Diego State University sociologist Ruben Rumbaut (1987). First he observed that the Hmong students in San Diego were earning better grades than most ethnic groups, including native born Americans. He also said that Hmong students had good school attendance, the lowest school dropout rate in the city, high math scores on national standardized tests, and a low rate of delinquency. But then he said that despite the high success in high school, they were the least likely to go on to post-secondary education. Why? Because ". . . traditionally, the authority of Hmong parents is absolute, a trait that produces hard-working, obedient students who thrive in the structured setting of high school but who, after graduation, often flounder when faced with the bewildering array of choices that no previous generation of Hmong ever had to make. Many Hmong young adults retreat from these uncharted waters to a traditional way of establishing status: getting married and having children." (Renard, 1988, and Rumbaut & Ima, 1987).

Indochinese Bilingual Education Programs in Wisconsin

The Madison School District Program. Since the Hmong settled in concentrated housing patterns, the school district found bilingual staff to serve as educational liaisons in these residential areas. The English as a Second Language (ESL) program was augmented to meet the influx of refugees. The ESL curriculum at the high school provided for two hours of language instruction (one hour of reading and one of grammar), one hour of bilingual math, one of science and one of social studies. The students were immediately mainstreamed in physical education and eventually in typing and industrial arts classes. Sixteen ESL and bilingual courses were offered at a variety of skills levels to suit the students' needs. The classes were taught by ESL teachers and Hmong bilingual staff. Classes were arranged according to skill level and not by age.

Upon completion of the ESL program, the students are mainstreamed. Bilingual staff provide individualized support to mainstream teachers and to

students to supplement the help available from the writing lab and the school's counselors. The orientation was to help Hmong students learn English and simultaneously upgrade their overall knowledge of subject areas. In addition to the academic program, a local technical college was utilized to help the Hmong students with any desired vocational training.

The Sheboygan School District Program. This school district established five ESL Centers for language training preliminary to enrollment in neighborhood mainstream programs (elementary school level, middle school, and high school). Students with little or no English language proficiency enter the ESL Centers. As they learn speaking, reading, and writing skills, they join mainstream classes within the ESL Center. Students are transferred to neighborhood schools when they demonstrate they can manage satisfactorily in all-English language classrooms with the occasional help of a traveling ESL teacher. The district also ran a summer program of English skill building for the Hmong students. High school students with minimal English language skills entered the ESL program. As their language skills improved, they were moved into transitional classes which would build on the basic skills into the more complex skills and language. The transitional classes were coordinated with the mainstream curriculum in such a way that students learned the same basic area skills and concepts as their mainstream peers. Transitional classes are then taught by an ESL teacher and bilingual aide with a subject area teacher. The students generally remained in this concept-based, transitional curriculum for two to three years before being fully mainstreamed. The high school student received additional support through a bilingual tutorial service. A Hmong-English bilingual concept dictionary is currently being developed by the students to use with low proficiency students and to be used to strengthen home, school, community interactions.

In general, the orientation of the Wisconsin Hmong education program (similar to other programs in the United States) is that of ESL and bilingual teachers in special classes leading to eventual mainstreaming. The special classes also use mainstream content material and not just language training.

Specific Strategies in Teaching Language Acquisition

Without a doubt, language acquisition is the most crucial problem in Hmong assimilation. The traditional methods of teaching ESL have given way to

a Whole Language Approach (Hamayan & Pfleger, 1987). In this new method, three approaches are used; (1) the Language Experience Approach, (2) Shared Reading with Big Books, and (3) Sustained Silent Reading.

First, the Language Experience Approach (LEA) is based on the idea that children are better able to read materials that come from their own experience. Much of the time in this method is spent in eliciting oral language from children and shaping it in preparation for use as written material. For example, children will tell a story which the teacher will write and the child will read to the teacher, or in a small group, or in front of the class. The learning experience is highly motivational and the interrelationship between oral and written language is made very clear to children in a natural way. Also used in LEA are pictures, questions and modeling of augmented responses. For example, upon showing a child a picture of a monkey, the teacher would say, "Danh, what do you notice about the monkey's hands?" The child might respond in a limited way by just saying, "Small." The teacher would then say, "That's right! The monkey's hands are small." Thus the teacher would be modeling and encouraging more complete sentences and a more articulate style of communicating.

Second, Shared Reading with Big Books is like reading a bedtime story in the classroom. The stories are high interest with pictures, enlarged print and many cues to the meaning. Stories can be read over and over and some become requested as favorites. It is a shared experience that often begins with the child occasionally mumbling along with the reader, ". . . with mumbles eventually turning into recognizable words, or they may echo-read, repeating parts of the story as it is being read" (Hamayan & Pfleger, 1987). After the story, there can be a variety of activities ranging from questions, dramatizations and even having the children compose variations on the story, such as a different ending.

Thirdly, in the whole language literacy program there is a time for Sustained Silent Reading. This is the time when children can enjoy reading their favorite books on their own and at their own pace. Reading is viewed as an enjoyable experience and not one that causes stress or embarrassment. In a highly literate environment, people read for pleasure. This type of reading, of course, also improves reading skills.

Bilingual Semantic Mapping

Semantic Mapping, also called Semantic Webbing, is a categorical structuring of information in graphic form. It is a reading comprehension strategy that uses circles and lines to depict parts of a concept or a story. For example, for the concept "food," lines could be drawn to "liquids" and "solids." From "liquids," lines could be drawn to more specific types of liquids and clusters of liquids all the way down to your favorite beer (Pilsner or lager). For a story, there can be connections between characters and themes of love and hate could emerge.

There is no one right way to develop a semantic map. Semantic mapping is a good procedure to follow when students are going to read several selections or chapters related to a given topic. The teacher and student can start the map before students begin reading and can add to it as students gain new background information from their reading. In this way, students will see clearly that reading helps build background for further reading. After students have completed their reading, they can return to their map to make additions or changes that resulted from their reading (Cooper, 1989).

Although I have not seen this strategy used in the educational programs I have reviewed, I think it could be a useful strategy to explore. The added dimension I would use in teaching language acquisition to Hmongs would be the use of Hmong bilingual categories. For example, in the above concept map of "food," I would use both Hmong and English words in the various categories. It is this method, Bilingual Semantic Mapping, I propose as a help for the Hmong in higher education.

It is interesting that a new computer program has recently emerged in the Macintosh Apple Computer line. It is called "HyperCard" and it boasts that you can now begin to use the computer like the human mind, by using the information processing strategy of association. It seems to me that this looks very much like a sophisticated semantic mapping (concept formation) technique.

Finally, I believe that Bilingual Semantic Mapping is an intrinsically motivating method to acquire language skills while learning concepts. This next year I hope to explore this method as we ultimately try to help our Hmong friends communicate effectively and gain, once again, the independence and freedom they once enjoyed...long ago in the mountains of Laos.

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End Notes

U.S. HMONG POPULATION BY STATE (Office of Refugee Resettlement, Summer 1988):

California	58,976	Pennsylvania	750	New York	300
Wisconsin	16,456	Illinois	702	Oklahoma	300
Minnesota	13,700	Kansas	600	Utah	168
Michigan	2,610	Massachusetts	525	Tennessee	105
Rhode Island	2,178	Ohio	455	South Carolina	84
Colorado	1,300	Iowa	403	New Jersey	70
Washington	1,182	Texas	395	Indiana	65
Oregon	1,130	Montana	390	Arkansas	46
Georgia	823	Nebraska	366	Virginia	34
North Carolina	818	Connecticut	300	South Dakota	22

EXAMPLE OF HMONG WORDS WITH DIFFERENT LETTER ENDINGS INDICATING THE DIRECTION OF THE VARIOUS SEVEN TONES:

pab	("pah" - short, level, high)	help
paj	("pah" - longer, falling, high to middle)	flower
pav	("pah" - longer, rising, middle to high)	tie
pa	("pah" - long, level, middle)	breath
pas	("pah" - short, level, low)	stick
pam	("pah" - longer, low, falling, abrupt end)	blanket
pad	("pah" - longer, low, rising and falling)	-
pag	("pah" - longer, low, falling, breathy end)	melon type

CONTRASTING CHARACTERISTIC OF THE HMONG WITH THE LAO (Adopted from Reed, T. T-Q. & Vang, T. F., "The Hmong Highlanders and the Lao Lowlanders," Illinois Office of Education, July 1978):

Ethnic Identification and Location:

The Hmong are found not only in Northern Laos, but also in the Southern provinces of China, Northern Vietnam and Thailand. The Hmong of Loas were concentrated in Xieng Khouang province. The total Hmong population of Laos was estimated at between 300,000 to 500,00 in 1971. (See Figure 1, p. 212.)

The Lao, numbering over 1.5 million, are linguistically and culturally most closely related to the Northeastern Thai.

Linguistic Affiliation:

The Hmong language is classified as a separate branch of Sino-Tibetan. It is monosyllabic and tonal (7 tones). While differences exist in the word order and phonemes, the syntax is similar to that of Chinese. The written language has only recently been developed through missionary efforts.

The Lao langauge is classified under the Tai branch. It is predominantly monosyllablic and tonal (6 tones). The written form is derived from the same sources as the Thai language, Pali-Sanskrit.

Settlement Pattern:

The Hmong occupy the mountainus regions of Laos at an altitude of between 3,000 to 6,000 feet.

The Lao settle along the Mekong River and the alluvial plains of its tributaries.

Economy:

The Hmong of Loas are mainly slash-and-burn cultivators, although some have adopted wet-rice agriculture. Until 1971, when the cultivation of opium was declared illegal, opium had been the major cash crop for the Hmong. Raising of livestock, such a pigs, poultry and goats, is essential to their economy. The Hmong are celebrated horse breeders and trainers. There are also active traders.

The Lao lowlanders are predominantly wet-rice agriculturalists. Like the Hmong, they raise livestock, cultivate minor cash crops and grow vegetables.

Division of Labor:

Men prepare the field, care for the crops and raise the livestock. At harvest time every member of the family participates. Women are more active than men in the production of opium. Women are responsible for domestic chores. When not engaging in cultivating their farms, the men derive additional income through hunting and trading.

Similarly, the Lao men do most of the heavy work in the preparation of the paddy fields. At harvest time, every able-bodied member participates. Like the Hmong men, the Lao men fish and hunt while the women tend to domestic tasks. The Lao women often engage in trade and manage the financial affairs of the household. It should be noted that in many cases the division of labor is not clearly defined, since Lao men and women share many tasks.

Family

The household (an extended family based on a patrilineal clan system) is the most significant unit in the Hmong culture. One household may house as many as 35 people under the same roof.

The basic unit of the Lao society, like the Hmong, is the household, which consists of the nuclear family. The extended family is, however, not uncommon.

Child Rearing:

The child is cared for by members of the household. Children are nursed as long as the mother has milk. Weaning, then, is not a traumatic experience for the Hmong child. There seems to be little toilet training. The Hmong children learn to share responsibility at an early age.

Like the Hmong, the Lao child is cared for by the mother, father, and the siblings. There is a lack of overt guidance by the parents to acquire any skills. Parental permissiveness continues throughout childhood. The Lao child, in contrast to the Hmong child, is not pushed to perform household and farm tasks or accept any responsibility.

Descent:

The Hmong trace descent patrilineally.

The Lao, unlike the Hmong, distinguish relatives bilaterally.

Social Structure:

The Hmong village consists of extended households based on the partrilineal clan. The number of households ranges from 8 to 40. The number of clans within one village, on the other, varies from one to four. The Hmong headman, usually the eldest head of a clan, commands great respect and authority from those under him. Besides the headman, the txi neng or "shaman" (male or female) play an essential role in the supernatural realm.

After the household, the most significant social unit is the village. Lao village inhabitants are often related to one another by blood or marriage. The Lao headman holds limited power and influence. His authority and influence are measured by the amount of wealth he possesses. Other significant figures in the Lao village are the Buddhist monk, the Mo phi or "shaman" (generally a male) and the village teacher.

Religion:

The majority of Hmong are animists with a strong cult of ancestral worship. They have an elaborate pantheon of tlan "spirits-deities." Related to the tradition of kinship, the Hmong believe that one day a Hmong king will arise as a liberator and lead the Hmong against their oppressors. However, half of the Hmong who came to the U.S. are Christians through the Missionary Alliance Denomination.

Although Theravada Buddhists, the Lao also believe in "spirits" phi. Young men are encouraged to enter a Buddhist monastary for at least three months.

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3. The Meo of Xieng Khouang Province. George L. Barney. Laos Project Paper #13. Waltham, WA: Brandeis University, 1961.

Figure 1.

MANAGMENT TRAINING ABROAD:
DO DEVELOPING COUNTRIES GET THEIR MONEY'S WORTH?

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It is not too difficult to understand why so many developing countries devote such a lot of time and money to the improvement of management - not only of governmental departments and agencies, but also such key institutions as schools, hospitals, and the military. It is clear that if developing countries are to achieve their goal of self-reliance, and promote socio-economic development, effective management will be needed at all levels - national as well as regional and local. It is also clear that effectiveness in management is important not just in the public sector but also the private.

Quality management is not a chance by-product of some set of activities. It is largely determined by the quality and quantity of management development activities available in a country. The aim of those activities is to increase the number and competence of individual managers. However, not to be overlooked is the quality of the management processes themselves.

If we were to analyze what proportion of the loan monies from such agencies as the World Bank that was given over to management training, in one form or another, we'd be quite astonished. The training and continuing education of managers is a "big ticket" item for most developing countries.

Training Abroad

In the past decade the amount of training dollars being spent on sending executives abroad has increased dramatically. This is not due just to the fact that international competition is on the increase. All countries, rich, poor, large, and small, are finding it more and more difficult, for example, to maintain their share of the export market. Indeed, those who can claim to have increased their share of any market are few in number.

Another fact, equally important, is just the converse of the former. International cooperation, on an ever increasing array of issues, has become an urgent necessity. If nations are to move toward greater economic viability, and

thereby acquire the means to promote social progress, there needs to be a deliberate and sustained effort to promote the exchange of knowledge and experience, and the sharing of resources for their material benefit.

When those decision-makers who are charged with the task of analyzing the long term needs of a nation take into account these realities, it is understandable that they would look to educational institutions in the so-called "developed" countries to supply the necessary training. It is a fact that many of the decision-makers in developing countries are themselves graduates of foreign institutions.

OUT-OF-COUNTRY TRAINING PROGRAMMES

When governments "buy" training programmes from foreign institutions in such technical fields as word-processing, artificial insemination in dairy cows, and aircraft maintenance, few analysts would raise their eyebrows. However, when a representative of a Pacific Rim country in Southeast Asia, for example, arrives at the office door of the director of a North American management training school, for example, to work out the details of a short term training programme for the heads of their regional technical colleges, there is a lot to be concerned about.

This next section of the paper attempts to describe what some of these concerns should be. However, if both the buyer (the developing country) and the supplier (the training institution in a developed country) are aware of the potential problems associated with management training abroad, then many of them can be significantly reduced, if not eliminated.

In the final section of the paper, I attempt to address the question of how to maximize a fair return on foreign training investments.

The Nature of Management

It is important first to reach some agreement as to what is the nature of management. In its broadest sense, management is concerned with the co-ordination of people's efforts and of the various resources available to the organization. Of course, the efforts being coordinated should lead, insofar as it is possible, to the fulfillment of the objectives of that organization (as set out by government or major shareholders, for example).

Management, in this sense, is a socio-technical activity. It is not only a social type of work but also it requires technical know-how. The technical skills associated with management are likely the least difficult to transfer from the training institution abroad to the person who has come from training. The technical skills needed by principal of a college in Saskatchewan are not much different than those needed by a principal of a similar institution in Fiji.

However, the social or human dimension of management is quite another matter. It is important to note at this point that because in organizations the human and technical factors interact, even the transfer of technical skill can be problematic. For example, a young unmarried woman might be able to learn a number of technical skills necessary to manage a bank, but because her particular society does not approve of her going out to work, and thereby being away from her home unaccompanied by a family member, she will decline opportunities to learn accounting, typing, and office procedures.

The transfer problem, according to analysts such as Hofstede (1983) occurs because the people with whom managers have to work (themselves included) are members of their society and react to management as members of their society. From one society to another, the human context differs. These differences affect the way people react in organizational settings, including the way they react to management actions.

Hofstede indentifies four aspects of our human context: social, educational, political and cultural. The social deals with the kind of collectivities to which people belong: tribes, clans, castes, classes, families, minorities, ethnic groups, religious groups, occupational groups. "Managing in a certain society presupposes an awareness of the meaning of these collectivities, including the ones to which the manager him- or herself belongs."

The educational aspect refers to the formal as well as the informal system of education in the particular society. It deals with questions related to literacy and the extent to which there are adequate levels of trained person in the various essential and support service areas. Management personnel should

be keenly aware of the educational levels of those on whom the organization must rely.

The political dimension is concerned with the way a society is governed: allocation of power; maintenance of order; the system of justice. Management in any society is very much controlled by the political system of that society. In some sense, managers play a political role.

Finally, the cultural aspect deals with collective ways of thinking. "Culture" has been defined in various ways. Hofstede defines culture as the "collective programming of the mind which distinguishes the members of one group from those of another." It consists of the patterns of thinking that parents transfer to their children, teachers to their students, friends to their friends, and leaders to their followers. "Culture is reflected in the meanings people attach to various aspects of life, their way of looking at the world and their role in it; in their values, that is, in what they consider as 'good' and as 'evil;' in their collective beliefs, what they consider as 'true' and as 'false;' in their artistic expressions, what they consider as 'beautiful' and as 'ugly.' Culture, although basically resident in people's minds, becomes crystallized in the institutions and tangible products of a society. . ."

Thus, management is very much constrained by its own cultural context. It seems to be virtually impossible to co-ordinate the actions of people without a deep understanding of their values, beliefs and expressions. Managers only get things done through other people. Thus, the importance of the cultural dimension in the development of management training or upgrading programmes.

Dimensions of Cultural Variants

Hofstede's research identified four dimensions common to all cultures. Each culture has evolved a different set of answers or strategies for how to handle each of the dimensions. The four dimensions are:

(1) Individualism versus collectivism: "Individualism stands for a preference for a loosely knit social framework in a society in which individuals are supposed to take care of themselves and their immediate families only. Its opposite, Collectivism, stands for a preference for a tightly knit social framework in which individuals can expect their relatives, clan, or other

in-group to look after them, in exhange for unquestioning loyalty." This dimension relates to people's self concept: "I" or "we."

(2) Large versus Small Power Distance: Power distance is the extent to which the members of a society accept that power (in organizations, in society) is distributed unequally. People in societies with large power distance accept a hierarchical order; in contrast, those in a small power distance society strive for power equalization and demand justification for power inequalities. "The fundamental . . . issue is how a society handles inequalities among people when they occur. This has obvious consequences for the way people build their institutions and organizations."

(3) Strong versus Weak Uncertainty Avoidance: Uncertainty avoidance is the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity. This feeling leads them to supporting beliefs promising certainty and to maintaining institutions protecting conformity. Strong Uncertainty Avoidance societies maintain rigid codes of belief and behaviour and are intolerant towards deviant persons and ideas. Weak societies maintain a more relaxed atmosphere. The fundamental issue addressed is "how a society reacts to the fact that time only runs one way and that the future is unknown; whether it tries to control the future or to let it happen." This dimension, too, has consequences for the way people build and manage their institutions and organizations.

(4) Masculinity versus Femininity: Masculinity stands for a preference in society for achievement, heroism, assertiveness, and material success. Its opposite, Femininity, stands for a preference for relationships, modesty, caring for the weak, and the quality of life. The fundamental issue addressed by this dimension is "the way in which a society allocates social (as opposed to biological) roles to the sexes. Some societies strive for maximum social differentiation societies between the sexes. The norm is then that men are given the more outgoing, assertive roles and women the caring, nurturing roles . . . such maximum-social-differentiation societies will permeate their institutions with an assertive mentality. Such societies become 'performance societies,' which is even evident from the values of their women. Other societies strive for minimal social differentiation between the sexes. This means that some women can take assertive roles if they want to, but especially that some men can take relationship-oriented, modest, caring roles if they want

to. Such societies become 'welfare societies' in which caring for all members, even the weakest, is an important goal, for men as well as women. Like the Individualism-Collectivism dimension, the Masculinity-Femininity dimension relates to people's self-concept: Who am I and what is my task in life?" This dimension has very real consequences for the roles men and women are allowed assume in organizational life.

It becomes quite obvious that problems can result when students from a country high on a particular dimension go to be trained in an institution in a country characterized as low. For example, if the student comes from a culture which is high on Uncertainty Avoidance, that is, sees as important the need for formalization of structures, and for ritualization of procedures, there could be deep misunderstandings if that student attends a university in a culture low on Uncertainty Avoidance. That institution would be relatively informal and there would be less emphasis on standard procedures for everyone. Such a student might regard the university as lacking standards, or even "rudderless."

Management Methods Are Not Value-free.

It can be seen from the foregoing discussion that management ideals and practices in a culture will have absorbed values from that culture. But if some of these ideals and practices were to be transported to some other culture, they might not get enough support.

Furthermore, according to Hofstede, there is no evidence whatsoever that one value system is economically more effective than another. For example, countries which have a more masculine value systems have not been more successful than countries with more feminine value system.

What counts is only that a country in managed according to the value systems held by its people. "The trouble is, that management experts going broad often hold value positions which they do not recognize as such, which are immaterial to the success of management, and dysfunctional in the other society to which they move."

How can the curriculum adequately take into account or acknowledge the values of the society to which students will be returning someday?

Language of Instruction

The language of instruction in overseas courses are typically not the same as the language of the managers who have been selected to go abroad.

This presents a very difficult challenge, indeed, to the host training institution.

Many projects, by the time the details of the training programme have been worked out, are already behind schedule. Thus, frequently, there is not sufficient lead time for those selected to go abroad to take an immersion language course. Also, international loan agreements require that training programmes commence by a certain date and close by a certain date. As a consequence, there is rarely enough time for candidates to be adequately prepared in that new language.

Short Term or Long Term?

Is there a greater return on long term training investments than on short term? There certainly are much greater costs. In the case of management level personnel there are additional questions, though, which need to be asked.

The leadership needs of developing countries are of two sorts. On the one hand, governments must be mindful of future needs. This would suggest that programmes and opportunities need to be in place that would attract suitable candidates at junior levels to consider specialized training. And, that training has to be of a very high calibre.

On the other hand, governments of developing countries frequently are faced with what are perceived to be shortcomings and inadequacies in the leadership personnel of key institutions. This would suggest a need for programmes and opportunities for managers already occupying middle and senior level posts. Such persons would be in their middle years, generally with families.

It would seem quite sensible, in these instances, for governments to invest in long term programmes (university degree programmes) for junior level persons who show considerable potential. Such persons are more likely to be single, more flexible, more able to endure the rigours of a long term experience. Also, they are less likely to be occupying key, pivotal positions in the institutions in which they are currently employed.

In the case of more mature, experienced managers, the situation of quite different. For such managers to be away from their institutions for periods longer than a few months could be quite disruptive. It is also the case that such persons would find it much more difficult to adjust to a new culture, and

the traumas associated with academic course work. However, to be away for periods of 3-6 months, could be a profitable experience for the managers themselves, without serious disruption to their institutions.

ENSURING AN ADEQUATE RETURN ON INVESTMENT

It would be foolish, indeed, to pretend to know all of the answers to the questions of how a developing country can ensure a more adequate return on its training investments. It will be obvious from the discussion above, that there are some inferences to be drawn.

Given the fact that the form and content of institutional management is derived from, and influenced by, the culture of the nation and of even the specific region, the training of managers, both present and future, cannot be easily carried out by foreigners in foreign settings.

There seems to be less risk, however, of cultural dissonance and confusion resulting from short term experiences. The monetary and personal costs are certainly less, too.

But, how does a developing nation meet its long term needs for high quality managers in its key sectors?

The answer seems to favour the development of an internal (domestic) training capability. This does not mean that foreign expertise is not needed. What it does mean, though, is that the foreign "visitors" must first spend time being "learners" before they can be successful as "teachers." So often visiting experts are the teachers, and the locals are the learners.

Preparation of the teachers can start even before they leave their home institutions in Canada, the U.S.A., or Europe, for example. "The payoff of money spent on the culture training of experts from more developed countries before they go to less developed countries is probably higher than the payoff of money spent on the technical training of people from the less developed in more developed countries. This should have consequences for the allocation of training budgets." (Hofstede, 1983).

This notion was built into a recent proposal prepared by The University of British Columbia, in consultation with Beijing Normal University. The proposal was part of a larger set of exchange agreements being discussed by The Peoples Republic of China and Canada's International Development Agency (CIDA).

Even so, it is not likely that foreign trainers, culturally trained or not, can realistically hope to develop management ideas and models that will be not only effective but also be accepted. It would appear that this task has to be carried out by the managers and management trainers of the country itself.

Hofstede (1983) suggests that there is a process which needs to be followed. This process includes a critical analysis of the successes and failures of the transfer of management ideas and practices from "the outside," as well as an analysis of how activities were traditionally managed in the particular society. He suggests that the process "look for alternatives which show a better fit with both local cultural traditions and the requirements of modern technology." Of course, at some point there has to be a trying out of the various alternatives and a documenting of their successes and their failures.

This latter notion, the trying out of various alternatives, was an integral part of a short term training programme developed by The University of British Columbia in collaboration with the Ministry of Education and Culture, Republic of Indonesia.

The Ministry contracted to send a number of principals of Indonesia's teacher training institutions to UBC for a 3-month intensive course. The course focus was "managerial leadership" development. An important component of that course was the design of a "back home" project which involved the trying out of various alternatives in search of a solution to some well-documented, practical, management problem.

Another example, much better known, is that of the transfer and adaption of various American and European management "inventions" - such as statistical quality control techniques, and Quality Control Circles. The Japanese firms were able to adapt these techniques into their organizations, by exploiting specific Japanese cultural traits. One such trait is the preference for sticking to rules and for meticulousness. Japanese managers and workers took quality procedures much more seriously than did their American and European counterparts.

Finally, it would seem eminently sensible to build in to any long range scheme a plan for regular exchanges between the staff in local management

institutions and the staff of training institutions abroad. One notable example is that of the Asian Institute of Technology in Bangkok. That Institute maintains a certain number of places for visiting professors. Preference is given to persons who have research interests which are relevant to the Institute's international curricula. At the same time, provisions exist for Institute staff to engage in postgraduate research and teaching in foreign settings.

The credibility which that institution has achieved throughout that region of the world is testimony enough to the value of a deliberate exchange programme for professional staff.

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CHANGING HIGHER EDUCATION IN SIBERIA: SOVIET PACIFIC HOPES

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Early in 1987, the central government of the U.S.S.R. adopted a policy statement, first broached in the previous year's 27th Party Congress, which spells out numerous changes to be made in Soviet higher (and specialized secondary) education.[2] The policy document teams with proposals which, if substantially effected, will result in immense change in Soviet universities and institutes.

Along with other major industrialized countries both East and West, the Soviet Union now regards higher education as a basic industry, essential both for economic and for sociopolitical reasons[3]. Its new policy statement on higher education thus makes clear that the changes are sought for meeting economic and sociopolitical needs currently facing the country.

The same current needs have restimulated the perennial Soviet interest in developing Siberia and the Soviet Far East. The official visit of Mikhail Gorbachev to Vladivostok in July, 1986, and his later address in Krasnoyarsk, signalled the serious regard in which his administration holds such development of Soviet Asia.[4] That Siberia indeed occupies a key role in current Soviet plans for rebuilding the country is demonstrated by the recent completion of the "BAM" (Baikal-Amur Mainline) railroad to connect with a new port on the Pacific, rapid growth of cross-border trade with China, concerted efforts to attract foreign investment in energy extraction and other initiatives since 1984.

Therefore, the condition of higher education in Siberia also assumes new importance in the overall Soviet drive for domestic prosperity and stability. It doubtless will help determine whether the USSR succeeds in becoming a prominent and durable neighbor on the Pacific.

Siberia's long-term difficulties in attracting and retaining skilled persons in sufficient numbers continue at the present time, although its resident population has increased at a rate slightly faster than that of the USSR overall.[5] Higher education affects not only the supply of highly trained

manpower for industrial and trade enterprise in a region, but also the supply and quality of professionals for its service sector, such as school teachers. So it plays a significant role today in retaining educated personnel in Siberia.

Problem of Changing Higher Education

Higher education as a social institution -- the university in particular -- has proven notoriously resistant to planned change, whether East or West. Studies of American institutions since 1950 tend to support that general axiom.[6] In any case it will require more than an official directive from the Central Committee to effect the desired changes in Soviet institutions of higher education. The current on-going study of how certain changes actually occur and endure can shed useful light on: (a) the outlook for success of efforts in Siberia to rebuild the Soviet economy, and (b) processes which work to induce major changes in Soviet institutions. That is the aim of the long term study of which this paper forms a small early portion.

The present paper offers evidence that indeed there is "more than an official directive" supporting the major changes proposed and that higher education institutions in Siberia already evince momentum toward realizing some of them: I. First, this presentation will sketch some outlines of the academic enterprise in Siberia/Far East, its parameters. II. Then it will list, for reference, four main factors found elsewhere in industrialized countries when changes in traditional academic institutions have endured. III. Finally, several changes that are named in the new Soviet policy will be discussed along with evidence they may be realized in Siberian institutions.

Say "Vooz"

The Soviets use an acronym, VUZ for "higher instructional institution" (Vysshe Uchebnoe Zavedenie); "VUZy" is the plural and this abbreviation will be used throughout the rest of this article.

I. AN OUTLINE OF HIGHER EDUCATION INSTITUTIONS IN SIBERIA AS OF 1986-87

Seen from the east, the Soviet Union, with a 7,000 mile coastline on the Pacific,[7] takes its place among the so-called "Pacific Rim countries." Although the area known as Siberia consists of many different political sub-areas east of the Ural Mountain crest, it commonly is studied in three

major parts for economic planning purposes:[8] (1) Western Siberia stretching from the Ural Mountains nearly to the Yenisei River and from the northern border of the central Asian Republics on the south to the Arctic Ocean; (2) Eastern Siberia, generally from the Yenisei drainage eastward toward the Lena River (for the northern portion), down the eastside of the Lake Baikal basin, and along the whole border with Outer Mongolia on the south; and (3) the Soviet Far East, extending to the Pacific and including Yakutia ASSR (in the northern portion). (See Figure 1, page 248.)

These combined areas of Siberia contain a population only one and a half times that, for example, of California -- 36 million as compared to 23 million in 1980 -- and somewhat more than 12% of the total USSR population. Siberia grew faster in the 1970's (10%) than did the USSR overall (8%).

Some 72% of the population of Siberia are listed in the 1979 census as urban dwellers. So, while the vastness of Siberia may seem to defy generalizing, actually the Siberian population and their VUZy cluster along a limited corridor running along the southern edge of the map. Also, in the southwestern corner, i.e., at the southern end of the Ural Mountain, are several oblasts with large, heavily populated cities that the Soviets no longer count within the "economic planning areas" of Siberia.

The number of Siberia's institutions (VUZy) approximates that of California's public colleges and universities -- 135 to 136, and equals 15% of the total VUZy in the USSR. As listed in the 1987 edition of the USSR Handbook of academic institutions and programs (Spravochnik dlya postupayushchikh...1987),[9] Siberia's 135 VUZy include 12 of the USSR's 68 state universities, 30 of its 200 teacher's colleges, 14 of its 76 medical institutes and 12 of its 65 polytechnical institutes (see Table 1).

One must use great caution in comparing such numerical data with those of U.S. institutions for perspective. Most Siberian VUZy, for instance, have smaller enrollments but higher retention of undergraduates than American public colleges and universities. Most Siberian universities have narrower curricula (i.e., "fewer majors"), but advanced learning in many fields is pursued in separate institutes rather than in universities. For example, the Soviets usually operate professional schools such as engineering colleges and teachers colleges separately from universities. The Soviets overall have no private nor proprietary colleges, although they do have an extensive network of organizations that offer adult education beyond secondary schools.[10]

Yet these few statistics do provide evidence of a widespread structure for postsecondary education across Siberia. Indeed a secondary purpose of this presentation is to call attention to the amount of higher learning activity already occurring in this region across the North Pacific.

Table 1

HIGHER EDUCATION INSTITUTIONS IN SIBERIA, 1987

	Siberia	All USSR	Siberia as % of USSR
Population, 1979 Census[1]	38 million	280 million	14%
Number of VUZy[2]	135[3]	881[4]	15%
Universities	12	68	17%
Teacher's institutes	30	200	15%
Medical institutes	14	76	18%
Polytechnical institutes	12	65	18%

[1]Population figures here are rounded, while VUZ tallies are intended to be precise. As noted elsewhere in the paper, the author has included in his definition of Siberia three oblasts at the southern end of the Urals and historically part of Siberia which, according to Polansky, the Soviets do not include in Western Siberia as an economic planning region: Chelyabinsk, Sverdlovsk and Kurgan. More densely populated than other parts of Siberia, these three oblasts account for some 8.9 mill. of the total population.

[2]VUZ - "Higher Instructional Institution"

[3]For comparison/perspective, the State of California had 136 public institutions of post-secondary education at this time.

[4]From the 1987 "Handbook for Applicants to Higher Education Institutions." Soviet officials, however, use the figure 894 or 896 in published statements. The difference may be due to their counting certain large "filialy" (branches).

(Dale M. Heckman, 1988)

Distribution of Vuzy

In their efforts to entice workers and professionals to move into labor-short regions, Soviet planners must pay attention to providing adequate

schools and teachers for the workers' families as well as to providing continuing education at professional levels. Table 2 shows, therefore, how VUZy are distributed in Siberia by planning area. While there is no precise relationship between the number of VUZy and a planned economic goal for a region, it is interesting that, at the beginning of the 1980's, the Soviet Far East had 8 teacher training institutes plus one pedagogical faculty within a university (Yakutsk U.) for some 6.8 million population (1 per 755,000), while Eastern Siberia had 6 for a population of 8.1 million (1 per 1,350,000).

This correlates positively with the comparatively high levels of higher education attained among the populations of some oblasts in the Far East, although not enough is yet known to ascribe to this correlation any cause-effect relationship.[11]

Table 2

HIGHER EDUCATION INSTITUTIONS IN SIBERIA,
BY TYPE AND BY ECONOMIC PLANNING AREA[1]

	Western Siberia	Eastern Siberia	Far Eastern	TOTAL SIBERIA
Universities	8	2	2	12
Polytech institutes	5	4	3	12
Pedagogical institutes	16	6	8	30
Medical institutes	8	3	3	14
Agricultural institutes	5	3	3	11
All other VUZy[2]	35	10	11	56
Totals:	77	28	30	135[3]

[1]Primary source: Spravochnik dlya postupaiushchikh...1987, the all-Soviet "Handbook for applicants to higher education institutions." Translations of terminology are the author's.

[2]"VUZy" = Higher Education Institutions. These "all other" types include a wide variety of engineering and technical schools; the tallies in general do not include "fillialy" (branch campuses) of institutions located elsewhere, nor correspondence programs.

[3]Thus, Siberia has slightly more than 15 percent of the total VUZy listed in Spravochnik...1987 for all USSR.

(Dale M. Heckman, 1988)

Governance/Structure to 1986

While the USSR until 1986-87 has had a central Ministry of Higher and Secondary Specialized Education with much authority, in some ways the "system" of Soviet higher education has resembled a tangled web. Many ministries and agencies, at both the all-Soviet and the individual republic levels, have shared the authority and decision-making; these have varied according to the nature and special field of each VUZ.

For example, in addition to a state university, the city of Novosibirsk (Western Siberia) claims eleven VUZy. These include:

- institute of construction engineering
- electro-technical institute
- pedagogical institute
- institute of rail transport (engin.)
- institute of water transport
- institute of agriculture
- institute of communications technology
- institute of economics
- institute of cooperative management (trade)
- medical institute
- conservatory of music

These VUZy have been administered under nine separate ministries of government, most of those at the republic (similar to "state" or "province") level and some at the all-Soviet level.[13] A pedagogical institute, for example, normally operates under the Ministry of Education of its own republic -- in Siberia, this is the Russian Federated Republic. A medical institute or physical culture institute is under the Ministry of Public Health, and institutes of transportation engineering are under different ministries depending on whether their transport operates over land or water. By no means has higher education been tightly centralized, even though individual institutes have had little control over their own curricula.

The newly adopted policies of the USSR aim to change this, putting more decision making into the hands of administrators at the institution level, while simplifying lines of authority and accountability.

Curriculum Decisions

Despite the dispersed nature of decision making power, VUZy individually have not had control over curriculum formation for their own students. The curriculum and academic program approval for the pedinstitute at Khabarovsk (Far East), for example, is reported to reside with the "Ministry of Higher and Secondary Professional Education" of the USSR, although in some aspects it operates under the aegis of the Ministry of Education for its republic, the RSFSR.[13] (For especially qualified students who made formal request, prior to 1987, the local faculty council could approve a somewhat individualized study program, however.) Further decentralizing of authority therefore might not necessarily increase flexibility for the individual VUZ and its student, as desired in the new guidelines, but "localizing" it would.

Covering approximately five years/ten semesters, the curriculum of undergraduates usually has consisted of 30 to 40 titled courses and accounted for some 3,700 to 4,800 class/lecture hours. In addition to the courses required for a student's specialization (major field), the studies in social sciences and other subject areas, as listed in Table 3, are usually included.

Table 3: SAMPLE DISTRIBUTION OF "GENERAL EDUCATION" SUBJECTS IN VUZy

Total Class Hours by Academic Major

Subject/Title	Humanities	Nat.Sci./Math	Tech.	In Which Semester
Hist. of Communist Party USSR	120-200	170	170	1,2
Philosophy	140	140	140	3,4
Polit. Economics	100-140	140	140	5,6
Scient. Communism	80	80	80	7,8,(9)
Scient. Atheism	24-36	36	36	5,(7)
Jurisprudence	40	40	40	7,(8)(9)(10)
Foreign Lang.	240	210	210	1,2,3,(4)(5)
Ethics/Aesthetics	36	36	36	7
Physical Developmt.	140	140	140	1,2,3,4
Totals	920-1152	1092	992	1-10

(Source: Correspondence from Prorector Svetachev, Khabarovsk Pedinstitut, 1988)

Non-instructional Institutes of Research

It is important to note here that specialized research institutes commonly have not been part of universities or other teaching institutions, i.e., VUZy. The Soviet Academy of Sciences has the headquarters of its Siberian Division outside of Novosibirsk, in Akademgorodok (see below); numerous research institutes, whose primary concern is not instructional, come under the aegis of this Siberian Division. The Division also has branches or affiliates, furthermore, in 5 other cities across Siberia, and each of these has responsibility for a number of research institutes.[14] More will be said later about relations between these institutes and the VUZy, but the Academy and its individual members remain very influential in matters concerning the VUZy of Siberia.

The Siberian Library Network

Undergirding all other resources for learning and research, the all-Siberia library network has its home base in Novosibirsk. The "State Public Scientific-Technical Library" (from Russian, the initials are GPNTB) traces its founding to the very beginning of the Soviet era; today it provides access to Siberia's combined collections of over eight million volumes. According to Polansky, this GPMTB is Asia's largest library system and within the USSR, its holdings rank next in size to those of the Lenin Library in Moscow.[15]

II. CORRELATES OF SUCCESSFUL CHANGE IN WESTERN INSTITUTIONS OF HIGHER EDUCATION[16]

Those who have studied the ways in which changes occur in universities and other academic institutions of the west, especially in the latter half of the 20th Century, commonly have identified several factors that seem characteristic of changes that endure in contrast to those that fail:

- The impetus for most major changes originates outside the institution itself. A state masterplan, national legislation, or a report from a prestigious study (e.g., large foundation or commission) may build upon information and insight from within the institution, but it provides external authority for the new departure.

- Special fiscal incentives (not usually to individuals) make the desired change possible and even palatable for some constituencies inside the institution.
- Adding a new institution which incorporates in itself the desired change(s) attracts devotees of the idea and avoids displacement of persons with vested interest in the old ways.
- Touting the change, investing it with "specialness," provides a unique kind of incentive for the participants to succeed in and protect the change (Hawthorne effect).

In the discussion to follow, most of these change-factors will be appear in the Siberian context.

III. PROSPECTS FOR CHANGE IN SIBERIA

On reading the 1987 "Fundamental Guidelines" for changes in the VUZy, even a person lacking previous acquaintance with Soviet education could readily see an overall potential change of immense proportions. Here one also can discern the urgent significance the Soviets attach to higher education as a fundamental part of efforts to rebuild the nation's economy.

Some of the policy changes aim toward making individual graduates more adaptable to varying circumstances on the job, more autonomous in decision-making and problem-solving, more broadly grounded and interdisciplinary as well as involved in practical efforts for civic improvement, and more self-impelled in continuing their formal learning beyond graduation. These changes strongly reflect perceptions of what is needed for a technology-driven economy.

For attaining such changes, near-term objectives include focussing more responsibility at the local institution level and simplifying the lines of authority above that level, as well as involving the industries that employ graduates in greater collaboration with VUZy.

Each of the following four sections will first mention a cluster of changes approved by the government and then discuss relevant information specific to contemporary Siberia and its VUZy:

1. Closer Collaboration: Education, Research, Industry

In their first cluster of needed changes (Section 1), the guidelines call for increasing the collaboration among higher education, production and research organizations by:

- Creating additional complexes of educational, research and production institutions with regular interaction among workers, scholars, researchers and trainees;
- Partially reimbursing higher education institutions by the enterprises which employ their graduates (referred to commonly as specialists").

Akademgorodok: The Tested Model: The Soviet's pilot experience in a collaborative interaction among teaching, research and production organizations has already occurred in Novosibirsk. Subsequent versions of this pilot model are appearing in Irkutsk and other Siberian locations. The new policy can be viewed as commending, in effect, this Siberian model to the rest of the country.

In evergreen forest south of Novosibirsk stands "Academic Town" (Akademgorodok), comprised of Novosibirsk State University and some 19 diverse research institutes. The University's instructors consist mainly of staff members from the institutes. Research foci of these institutes, not designed to be "instructional" in nature, range from economics and philosophy to nuclear physics. Akademgorodok is also the home of the Siberian Branch of the Soviet Academy of Sciences. Altogether this select community of research and teaching personnel houses a population of 40,000 including spouses and children; additional students and workers commute by bus from nearby Novosibirsk.

Reportedly in the 1950's, the Soviets chose this area 900 miles "behind" the Urals as a deliberate pilot attempt to mesh VUZy more closely with research institutions, both basic and applied. Dormitories, shops, theater and other facilities make the total complex physically resemble a large state university campus of the American or Canadian midwest. International conferences of scholars are held here frequently. Academically, as a complex of learning, Akademgorodok vies with Leningrad for second place rank next to Moscow among Soviet centers of higher education. The clustering has provided a model now deemed successful enough to be tried elsewhere in the Soviet Union.

By 1982 the Siberian Branch of the Academy of Sciences could claim that, in addition to the clustered institutes just mentioned:

> "The Novosibirsk Akademgorodok has become gradually surrounded by a so-called 'assimilation belt,' i.e., design offices and pilot plants of various ministries meant for introducing scientific concepts and developments into production within the shortest possible time."[17]

Scholars from Akademgorodok have wielded influence at the highest levels of Soviet power. The chief architect of the economic side of the "perestroika" program in the Soviet Union is Abel G. Aganbegian, a member of the Siberian Branch of the Academy of Sciences and former head of the Institute of Economics and Organization of Industrial Production here. Tatiana Zaslavskaya, of the same institute, conducts sociological surveys vital to the new nationwide reforms.

Replications of the Model: The second-largest science complex in Siberia has developed in Irkutsk under the eye of the Eastern Siberia Branch, Siberian Division of the Academy of Sciences. Already referred to as the "Irkutsk Akademgorodok," this complex includes nine or ten diverse research institutes whose staffs collaborate regularly with the State University at Irkutsk and its own institutes and with some of the eight other VUZy in this industrial urban area.[18]

Rector Yuri Koslov of Irkutsk University (1986) plans for further integration of his university into the economic and social development of this region, as part of the developing new Akademgorodok. He reports steady progress in building reciprocal relationships with industries in the area and is aware of the need for more substantial support -- financial, material and job placement -- from that direction.

It is clear that in Novosibirak, in Irkutsk and elsewhere, these developments did not just begin with the proposals of 1986-87, but before the 1980's.

Besides the research institutes of the Irkutian Akademgorodok and those within the University itself, eight other VUZy in metropolitan Irkutsk include a polytechnic institute, an institute of economics and an institute for teachers of foreign languages. At the outset of the 1980's, approximately 60,000 students were enrolled in Irkutsk-area VUZy, taught by approximately 5,000 instructors. From 1971 to 1975, some 40,000 graduated; yet the ratio of

graduates per 1,000 workers in Eastern Siberia was reportedly still 20 percent less than for the RSFSR (Russian Republic) as a whole.[19] A substantial proportion of these attend in the evening and thus tend to be employed in surrounding industries while part-time as students.

Elsewhere in Siberia, other branches of the Academy of Sciences' Siberian Division have worked for years prior to the Gorbachev administration to bring into closer collaboration the VUZy, research institutes and production enterprises. In the Buryat Branch, for instance, the branch presidium "set up a Research Coordinating Council made up of members of the Branch (Acad. of Sci.), rectors of the (Buryat) republic's VUZy, and managers of large enterprises" prior to 1982. Other efforts in and around Siberia suggest a broad acceptance of the "akademgorodok concept" for tightening the loop of collaboration among academic instructional, research and production segments of the economy.[20]

Bounty Payments for Graduates Hired: The Guidelines propose that production enterprises pay a substantial "bounty" to the VUZ from which they employ new graduates and that they play an active role in determining the curriculum. There is ready motivation for Siberian mangers to participate in such a reciprocal process: (a) Some such subsidizing has already been occurring in Siberia as part of the extra efforts needed to attract and retain qualified personnel there. (b) The new determination to increase trade on the Pacific, together with somewhat enhanced authority of local plant managers, adds pressure on new managerial appointees heading Siberian enterprises to apply new technical knowledge which they might import to the enterprise via VUZy graduates and continuing education. (c) Industries in Siberia (incl. Far East) will be looking for help in making life more attractive for such graduates and for new workers from the western USSR, and regular interaction with residents of an akademgorodok might afford a desirable lifestyle for the new professionals and their families.

In summary, this cluster of proposed changes must seem to Siberian academics like hardly any change in policy at all, but rather an affirmation of a direction in which Siberian VUZy have been heading for some time.

2. Making Students More Flexible, Adaptable and Involved

Another set of changes directed by the government in "Fundamental Guidelines..." is entitled, "Raising the Quality of (baccalaureate level) Education" and proposes doing this, in part, by:

- Reducing the number of mandatory lectures per week while introducing more participatory, less passive forms of teaching/learning;
- Offering more electives within a given academic field;
- Adjusting curricula to combine "a deep fundamental knowledge with broad training for the (work in a given) field" -- (i.e., more theory of a field along with wider variety of practical exposure in it, to make students more adaptable).

At each of several Siberian VUZy visited in fall, 1986, there already was an explicit, top-level eagerness to reduce the number of required lectures per week and to increase curricular flexibility. Administrators interviewed expressed no reservations about this point, and one or two even implied they had helped to press for such a reform policy.

In the early 1980's Irkutsk State University had begun certain changes including a reduction of lecture hours, later proposed by the Gorbachev administration for all Soviet VUZy. According to Rector Yuri Koslov the number of mandatory lecture hours per week in the average undergraduate course load had already been reduced from 36 to approximately 24 prior to 1986; from that level the Rector intended to bring about further reductions until the average class-hours "would approach that of a student at M.I.T."

The intent of such reductions, of course, is not to reduce the amount of work but to increase the degree of involvement by students in their own learning -- less passive listening, more active thinking through discussions, taking part in research and other instructional modes familiar to American college students. On this point, the more flexible curricular model of American colleges seems attractive to VUZy administrators in Siberia.

Since the Guidelines bestow upon rectors allow more flexibility, including the authority for wielding faculty incentives, the diversifying of teaching modes has a fair change of success <u>if</u> both new and willing instructors can themselves become adept at the new modes quickly enough. It probably will help such a cause that a number of Siberian VUZy have begun to develop exchange

agreements for both students and faculty members with American institutions; currently there are such exchange agreements at Novosibirsk, Irkutsk and Khabarovsk.[31] It has been reported by host faculty members at Texas that visitors from the University of Irkutsk (1989) frequently ask about discussion-leading, simulation games and other non-lecture forms of instruction.

General Education: Beyond such exchange contacts, however, how shall VUZy enable students themselves to become more flexible, more adaptable to changes in technology and professional tasks? Vladimir Turchenko, a native Siberian and member of Siberian Division of the Soviet Academy of Sciences, argued already in 1986 that:

> The worker's ability to raise his skills, to change and combine trades, is . . . decisively affected by the level of his general education.[32] Prominent Siberian scholarship has long maintained that precisely for a new technological generation the postsecondary institutions also must recognize breadth of learning, diversity of fields of acquaintance, and a firm grasp of fundamental theory as basic fare for their future specialists.[33]

In fall 1986, Siberian VUZy already had begun seeking ways to broaden the curricula of their undergraduates. At the Pedinstitute for Foreign Languages (Irkutsk), Rector Emma Tiukovkina stressed the importance, in language acquisition, of learning theoretical bases of language as the surest way of becoming more adaptable to changes in that field. It requires at the same time a wider grasp of a field of knowledge extending to the fringe subjects around that field. Rector Tiukovkina also expressed the need for greater student involvement in learning, and more active instructional methods.[34] By fall 1987, Irkutsk State University had formed a new council for reshaping the curricula.

Thus some Siberian educators have been considering this type of change since before it became nation-wide policy. It could be that their biggest challenge lies in persuading industrial managers -- now partners in curriculum reform -- that for technological reasons a shift toward general education and diverse ways of learning is necessary.

Taking Part in Society's Tasks: Concern for student involvement and voluntarism in Soviet society parallels a current American concern. In

Siberian VUZy, there is a strong precedent for students' joining "workers' brigades" in summertime construction projects. Real economic need for these continues. In the building of new communities along the BAM railway, in helping to run the summer camping programs of Young Pioneers, in helping to ensure a complete harvest before the end of a short growing season, the appeal can be made in terms of demonstrable social needs. In Siberia the influence of the environmental/ecological movement seems especially strong. Siberian academicians and their research have played an important role throughout the 1970's and 80's in environmental policy changes.[38] Thus there probably are many matching needs between students in search of interesting volunteer work and environmental research projects in the taiga, the waterways, and the new heavy industrial centers of Siberia today. Since stipends for attending the VUZy now vary considerably in amount, they provide one source of material incentives to student volunteers. But it would be a mistake to think of incentives only in materialistic terms. Even among Soviet adults there are vivid models of voluntarism today. Public recognition, new adventures among one's peers, as well as being able to add "good works" to one's resume, are said to exert strong influence among young students to get involved in societal upbuilding.

3. Training for Independent Decision-making

The Fundamental Guidelines call, in relatively vague terms, for updating education and training to meet "contemporary demands;" the reason for this initial vagueness becomes more evident as the Guidelines then direct VUZy to provide not only training in Marxist-Leninist fundamentals but also in:

- Contemporary economic thought;
- Management skills;
- Organizational and developmental work;
- Methods of utilizing computer technology in (the student's) particular field of activity;
- A high level of general culture; and
- A foreign language.

As a result, the "graduate should stand out by virtue of his initiative, responsibility, a felt need to renew and enrich his knowledge on a continuous

basis, his ability for bold and innovative decision-making, and his ability to carry out those decisions with vigor."[16]

Toward such ideal ends, the Fundamental Guidelines put special emphasis on the universities' role in preparing skilled faculty for every arena where instruction takes place, both the highly theoretical and the highly applied and practical. It implies that the universities are expected to take the lead in this by working more closely not only with teachers' colleges (pedinstitutes) but also with the many other varieties of VUZy toward the desired flexibility in the teaching-learning process. This new flexibility then is to become a behavioral model for the young graduate.

In context, this section of the Guidelines evidently responds to a need for graduates to get beyond rigid and wooden interpretations of Communist ideology and to adopt more pragmatic attitudes that take into account the keenest perceptions of their present environment, especially economic ones. It recognizes an urgent need, if the country's enterprises are to become self-correcting and adaptable to new conditions, for managers and other professional persons to exercise more independent judgment in their local circumstances while still demonstrating that Lenin's vision works.

In any country, an effort to bring about a shift in the functional values, the "firmament of behavior," of educated citizens would constitute an enormous challenge. To the extent the VUZy can effect such change anywhere in the USSR, however, those in Siberia may stand the best chance. The chief reason for such a conjecture is the Siberian characteristic of self-reliance in contrast to the dependent caution of an "aparatchik" always consulting the printed regulations of central offices.[17]

What might complicate progress toward this group of changes for Siberian institutions would be to try "increasing the level of (general) culture" through additions to the curriculum. A faculty of engineering might understandably demand more, not less, of a student's academic time for applied technical learning in contrast to, say, Asian history or the Psychology of Organizations, even if the latter would provide important insights to the future engineer-manager in Siberia.

Student exchanges with other countries, or even between distant republics of the USSR, offer one way of quickly enlarging the mental universe of individuals, and often their resourcefulness or self-confidence as well.

And, as mentioned above, Siberian VUZy recently have increased the number of such exchanges including both undergraduates and faculty members. At the postgraduate professional level, the Far East State University at Vladivostok recently oversaw an extended visit of 400 physicians, engineers and managers to Chinese institutions so they could learn by immersion something more of the language and ways of doing business in that different culture.[38]

Most such efforts -- and they are increasing in Siberian VUZy -- should help bolster the self-confidence of the participants for individual decision-making in their professional roles, especially as they see that quality being modelled by their academic and political leaders.

There has been discussion at official levels of enabling the larger political units along the Soviet border with China (PRC) and Mongolia to arrange trade agreements across that border as well as with Japan and Korea on their own -- i.e., without prior consent from Moscow.[39] Such discussion, even if it came to naught, would certainly signal that individual initiatives taken or proposed for the common economic benefit will be welcome and not "counterrevoluntionary."

All these factors now combine to encourage, or at least to lend public permission for, the exercise of individual initiative in the public interest. If one can demonstrate that one's "bold decision-making and follow-through" suits the larger public interest, especially economic interest, one can justify a wide range of behaviors. On the heels of victories over the past two decades in Soviet environmental policy, the Siberian intelligentsia have reason to feel enlivened and reinforced by this part of the policy statement on VUZy.

Reference in the Guidelines to inculating "civic courage" in law students[40] may conjure up a vision of official encouragement for "whistle-blowers" or at least graduates willing to accept personal risk for the common good, the civic order. This really must be seen as an extraordinary goal for a public policy in the current age. How any VUZ may act upon it will present a continuing challenge. Again, however, a less-bureaucratized region such as the farther reaches of Siberia (i.e., Eastern Siberia and the Far East) probably will find this challenge inviting rather than threatening.

4. Strengthening the Role of VUZy in Continuing Higher Education

The 1987 Guidelines also declare as policy that post-VUZ (i.e. continuing) higher education must be strengthened with a major role in the effort to be played by the VUZy themselves:

- Every college graduate should update his/her knowledge at least every five years, preferably (and therefore not necessarily) at specialized institutions and by means of a three month leave from work;
- VUZy are to have continuing oversight responsibility for instructional method, quality, etc., in continuing education regardless of what branch of industry or government sponsors a given training program; and
- VUZy staff/instructors are to become more involved in continuing education programs.

As mentioned earlier, the central government regards continuing professional education in Siberia, and the closer involvement of VUZy in it, as an important component in the economic development of the region.

Within Siberia's VUZy, administors offer a somewhat divided perspective on the actual status of their continuing education programs as of 1986-87. On the one hand, Prorector Svyetachev of Khabarovsk Pedinstitute asserts that "many VUZy have worked out with employing bodies (esp. schools) longterm agreements concerning the joint preparation of specialists. This VUZ maintains communication with the employing bodies by way of personnel officers, who provide for periodic conference of (our) alumni, new teachers still on probation, and their mentors from the VUZ." In each locality, he says, "the major VUZy and the local councils sponsor joint institutes for raising the qualifications of the graduates."[31]

On the other hand, Irkutsk University reports that it "maintains communication with its alumni at the division or school level," and that these units follow the traditional pattern of meeting with their graduates once every five years.[32]

The reasons for this disparity may be quite straightforward. A single-purpose VUZ such as a teachers' college can establish -- and the one quoted above, evidently, has established -- an active working relationship over a long period of time with the schools and towns to which its graduates go for at least their first job. New teacher-graduates, for example, remain on

probation or apprenticeship for three years under a senior teacher while a faculty member from the pedinstitut stays in touch. A multi-purpose university, however, or its Faculty of Philology (comparable to a College of Letters and Science), probably has a more diverse field of employing institutions to which its graduates go after graduation. Tracking its own graduates beyond three years, therefore, and fulfilling their needs for on-going supplementary learning would pose a more complex task for a university than for a pedinstitute. So Continuing Professional Education may well have remained less developed by university than by a single-purpose institutions until the new (1987) policy assigned specific responsibility for this to each VUZ.

The special conditions of Siberia, in any case, press its major VUZy to devote new attention to continuing professional education. Perhaps now each VUZ will see it more as a responsibility for its service region rather than as a responsibility for tracking only its own alumni. Over ten years ago, V.N. Turchenko was arguing forcefully the direct relationship between continuing education and retention of the workforce in Siberia[23]. Although much of Turchenko's contention dealt with secondary/specialized education, he included higher education as well.

As production organizations (including schools) pay an increasing "bounty" for each graduate whom they employ, it will increase their incentive for maintaining regular contact with the VUZy from which their worker-specialists come. This could prove true of any Soviet location under the new payment system; Siberian logistics, however, offer a special circumstance which should enhance the role and accountability of the "sending" institutions and that is distance. Siberia has fewer institutions of any kind per square mile. While proportionately Siberia has a larger number of VUZy per 10,000 population than some other parts of the USSR, there are fewer cities in which they are concentrated. Therefore, if a given production organization has only two possible VUZy instead of, say, five with which to cooperate over the long-term on continuing T&D for its specialists, that should help to facilitate closer relationships between the enterprise and the VUZ.

Meanwhile, the living conditions in many smaller towns are such as to make it even more attractive for a Siberian worker to spend three months every four or five years in an urban area -- even in Siberia -- for professional

renewal. Thus Siberian VUZy would seem to have a promising chance for new collaboration in their continuing education responsibility. The incentives are in place.

Clarifying Accountability for Outcomes

"MinVUZ," the Soviet Ministry of Higher Education or its successor, now retains to itself the authority to appoint and dismiss the rector of an individual VUZ, regardless of which government branch otherwise exercises oversight for that VUZ. Given this simplification, rectors receive considerably more authority and responsibility for effecting changes within their individual institutions. They may use, for example, "material incentives for the improvement of faculty performance;" they will have greater latitude for individualizing the study programs of students. At the same time, the rectors will bear greater responsibility for improving the student outcomes of education -- the effectiveness and success of those graduating from their institutions.

This new policy necessarily favors academic expertise over industrial management, and efficiency over bureaucratic "apparatchik" influence in appointments of rectors. Sheer distance from Moscow also might help facilitate this; the change practically requires in a rector the kind of self-reliant or self-directing qualities which the new policy calls for in the next generation of graduates from the VUZy.

The administrators interviewed across Siberia in fall 1986 spoke with enthusiasm about the prospect of such a change; they would welcome, they said, the opportunity to fit a student's program more closely to that individual's actual aims or to the current needs of the intended profession. As mentioned above, Rector Koslov of the University of Irkutsk had begun before the policy change to prepare for the shift from total reliance on the lecture mode in some disciplines to student participation in research projects. Rector Tiukovkina was already working toward a new curricular concentration similar to an area studies or American Studies program. Elsewhere, too, changes were in progress which seemed to signal that Siberian academic administrators would gladly accommodate to the new level of accountability in exchange for greater powers for effecting changes locally.

The less academic VUZy, or those tied more closely to a single industry, may present a different picture. Any new administrative vacancies there might be open, under the new policy, to academic appointees from outside the industry specialty. In such VUZy we can only speculate on the industry's receptivity to the new policy at this time, for Siberia as for anywhere else in the Union.

Establishing New VUZy in Siberia

It can be seen, reviewing the selected changes discussed above, that some of the factors associated with successful changes elsewhere (see previous list, Part II, of this paper) are present or available -- initiative from outside the VUZ, for instance, special fiscal incentives, and so on. One important factor remains to be mentioned, however, which actually appears in the Guidelines document itself: formation of new VUZy that can incorporate the proposed changes from their very beginning.

The Guidelines make fleeting reference to establishing several new VUZy in Siberia. In its Section VI, which deals with "raising the quality of research and instructional personnel," the document calls upon seasoned faculty members elsewhere to give comprehensive assistance to the new faculties in VUZy "to be established in Siberia, the North, and the Far East." It offers no further hints about the number to be established, the timing, or the locations.

As mentioned earlier, to add new institutions has proved more successful, as elsewhere in the academic world, than to displace established ones of their customary ways and methods. The clearest possibility for effecting changes in Soviet VUZy lies in the new ones to be established in Siberia/Far East, where the desired features can be built in from the start.

Creation of new VUZy is being pressed publicly, moreover. For one, A.D. Boborykin has proposed a new, specialized university in the context of the teacher training needs of native peoples in the northern regions.[33] He suggests that such a university could be located "in <u>any</u> of the developed industrial and scientific centers of the European part of the RSFSR, Siberia, or the Far East, and most importantly where they have experienced faculty personnel and a well-stocked science library." While this sounds at first like

a generous breadth of choice, in fact these conditions quickly limit the choice to a very few possible locations. It is not yet known where new VUZy are to be established.

CONCLUSION

As shown by these first findings, there is much yet to be learned from the on-going study about higher education in Siberian institutions, especially at the local level. It would be foolhardy to predict now which changes will be adopted widely in Siberia, and where and when. From this initial exploration, however -- which combined a search of the current literature, on-site interviews in Siberian VUZy, and on-going correspondence with several rectors -- one can deduce a positive climate in Siberian VUZy for most of the changes proposed by the Party in its 1987 document. Of course a recalcitrant faculty could, if it desired, frustrate changes in the teaching-learning process, although there is no tenure in Soviet academia. Some of the proposals could be thwarted by forces beyond the VUZy themselves -- industrial managers, for example, further changes in the related government ministries, or simply a lack of financial resources. Yet other forces -- both internal and external -- continue to press for such changes in this key part of the socioeconomic infrastructure. As Soviet leadership turns its attention increasingly toward the country's potential on the Pacific, the next decade of changes in Siberia's higher learning may offer useful indicators of its progress.

Footnotes

1. Dale M. Heckman is a senior policy researcher with the California Postsecondary Education Commission and holds a Ph.D. in the dual field of higher education and ethics. Heckman has authorized two recent Commission reports on higher education for California's participation in Pacific Rim commerce and culture. Independently, he pursues a longterm study of higher education in Siberia and the Soviet Far East, in connection with which he conducted on-site interviews during a solo journey across Siberia in the fall of 1986.

2. Published as Osnovniye napravleniya perestroiki vyshshego i srednego spetsial'nogo obrazovaniva v stranye; Moscow, Vysshaia Shkola publisher, 1987, (71 pp. incl. appendices), "Fundamental Guidelines for Rebuilding Higher and Specialized Secondary Education in the Country."

3. The current Soviet view is stated strongly in the document itself (1987). For parallel official views in other countries, cf. esp. California Postsecondary Education Commission: The Wealth of Knowledge (Sacramento, 1984). Beyond its own statement on the economic role of higher education in a highly technologized society, this report lists other important U.S. statements in an appendix. In Richard Eckaus: Estimating the Returns to Education -- A Disaggregated Approach (Carnegie Commission on Higher Education, Berkeley, 1973), one finds a more skeptical and analytical viewpoint. What matters most in this case, however -- at least in the short term -- is not the accuracy but the strength of the official belief. By the 1980's, leaders of modern states and most developing ones overwhelmingly endorsed higher and technical education as basic to economic success. As examples, the following two (excerpted) statements appeared in the authors' mail while this paper was in process: "The educational infrastructure of a state is clearly deemed critical to the development of new business..." (Texas Legislature). "(Private higher education is) the key to lifting the Philippines out of dependency." (Report on Philippine universities.)

4. The Gorbachev address in Krasnoyarsk (Eastern Siberia) occurred in September, 1988.

5. See Rodger Swearingen, et al: Siberia and the Soviet Far East; Hoover Institution Press, Palo Alto, 1987.

6. Of course Soviet and American institutions of higher education differ in significant ways and one cannot lightly apply findings about "change" from one to the other. Yet in both societies they function as highly traditional institutions resistant to fundamental change and, with common parentage in Europe, they still can be seen as genetically more alike than different.

7. Source: Defence Mapping Agency, U.S. Navy, Washington, DC, 1987.

8. Cf. Patricia Polansky, "Resources for Research," in Swearingen, et al, op. cit. The current study includes in its definition of Siberia three oblasts which, according to Polansky, the Soviets do not include in the Western Siberia Economic Planning Area. Sverdlovsk, Chelyabinsk and Kurgan oblasts are all located at the southern end of the Ural Mountain chain and mostly on the eastern (i.e., Asian) side of the crest. Having become highly industrialized, their combined population of 8.9 million represents a higher density of population than areas farther east; yet there is historical and geographic justification for regarding them as part of Siberia.

9. All tallies of VUZy in this presentation, as well as the listings of VUZy in particular cities, are based on the Spravochnik dlya postupaiushchikh v VUZy, 1987 godu ("Handbook for Applicants to Higher Education Institutions, 1987"). This annual publication includes a directory and index (by city) of all VUZy in the USSR.

10. Cf. David C. Lee, "Public Organizations in Adult Education in the Soviet Union," Comparative Education Review, August 1986 (XXX, 3).

11. Population figures including highest level of schooling attained come from the Soviet journal, Vestnik statistiki (Bulletin of Statistics), 1980, Central Statistical Office, Moscow. They reflect the 1979 census.

12. The Spravochnik dlya postupaiushchikh... (see Note 9, above) indicates the supervising ministry or agency under which each VUZ operates.

13. Correspondence 1987 from Prof. Svetachev, Prorector, Khabarovsk Pedagogoical Institute ("pedinstitut").

14. Cf. Sibirskoe otdelenive akademii nauk SSSR, 1957-82; Moscow, 1982. (Siberian Division of the USSR Academy of Sciences 1957 to 1982"), published by the Academy of Sciences in Moscow.

15. Polansky, Op.Cit.

16. These correlates of change were identifed in studies of change during the 1960's and 1970's especially at the Center for Research and Development in Higher Education, Berkeley, where the author worked (1967-70). The strength of their influence on making changes last has faded, however, in the 1980's as financial stresses have enabled much slippage to occur in what were regarded as successful innovations.

17. See Note 14, above.

18. Source: on-site interviews and observation, fall 1986.

19. From Irkutskii gosudarstvenni universitet -- Istoricheskci ocherk (Irkutsk State University, a Historical Sketch), a commemorative volume published for the 300th anniversary of the City of Irkutsk; Irkutsk, 1979. Rector Y. Koslov wrote the concluding chapter from which these figures are quoted.

20. In Buryataski filial, Sibirskoe otdeleniye AN SSSR ("The Buryat Branch, Siberian Division of the Soviet Academy of Sciences"), Moscow, 1982. Certain other acronyms in current use reflect wide use of the concept. "Polytechnical institute" for instance is commonly call "VTUZ"; connected with the VTUZ at Sverdlovsk is an address, "VTUZgorodok." And in the mountain city of Ust' Kamenogorsk, south of the East Siberian border in Kazakh, ASSR, two separate VUZy share what is called a "Studgorodok."

21. Through Citizen Exchange Council (N.Y.) recent trial exchanges of undergraduates and faculty have occurred between: (a) University of Texas and Irkutsk State University; and (b) Stanford University and Novosibirsk State University. Independently, Lewis and Clark College and Khabarovsk Pedinstitut have begun an annual exchange (two-way) also.

22. V.N. Turchenko: The Scientific and Technological Revolution and the Revolution in Education; Progress Publishers, Moscow, 1976. Turchenko,

born in Tomsk, worked in the Siberian Division of the Academy of Sciences, Novosibirsk.

23. Cf. V.N. Turchenko, "Obrazovatel'ni potentsial Sibiri," in Sovetskaya pedagogika, 1979, No. 5, pp. 23-30 ("Educational Potential of Siberia"). An English translation appeared in Soviet Education, Jan. 1980.

24. Information about the Institute for Teachers of Foreign Languages, Irkutsk, comes from on-site interview and subsequent correspondence with Rector Emma Tyukovkina.

25. For a brief account of the Siberian origins of the Soviet environmental movement, see Farley Mowatt: The Siberians; Little, Brown, & Co., N.Y. 1971. For more recent years, see Robert Darst, Jr., "Environmentalism in the USSR," Soviet Economy, 1988, No. 4; the latter is also centered in Siberian efforts and loci. Charles Goldman, Professor of Environmental Studies at University of California, Davis, participated in cooperative study of both Lake Baikal and Lake Tahoe in an early recognition of the environment as an international issue and published Environmental Quality and Water Development, W.H. Freeman & Co., San Francisco, 1973.

26. Osnovnye napravleniya perestroiki vysshego i srednego spetsial' nogo obrazonvaniya v strane, p. 14. (Cf. Note 2, above, transl.)

27. Not only foreign visitors but inhabitants from both ends of the USSR commonly remark on this characteristic of "Siberiaki;" it is expressed in various ways -- "more friendly," "less cautious," "less bureaucratic" -- but seems analogous to the familiar stereotype of settlers in the American west. For example, a Soviet correspondent writing a brief account of his experience as a skiing competition in Minnesota, wrote that:

> "There was nothing (with hostile overtones a this event). We were just guests of good people. They resembled our Siberians . . . and with no less optimistic character."
>
> (In "Traveller's Notes," by V. Bogdanov, Twentieth Century and Peace, May 1988, Moscow.)

Perhaps the legacy of wilderness and self-reliance accounts for the characteristic. In any case, one may reasonably expect in Siberia an earlier acceptance of changes which tend in the direction of social openness, individual initiative and two way interaction between levels of authority.

It must be added that, from her more extensive 1980's experience of working with bureaucrats in Siberian cities, Polansky does not share such a sanguine view.

28. Source: address by Rector V. Gorchakov, Far Eastern State University (Vladivostok), to 1988 Annual Conference, American Association for the Advancement of Slavic Studies; Honolulu, HA, Nov. 1988.

29. Source: presentation by Deputy Foreign Minister for the Asian-Pacific Region, Vladimir Lukin, to Annual Conference, American Association for the Advancement of Slavic Studies; Honolulu, HA., Nov. 1988.

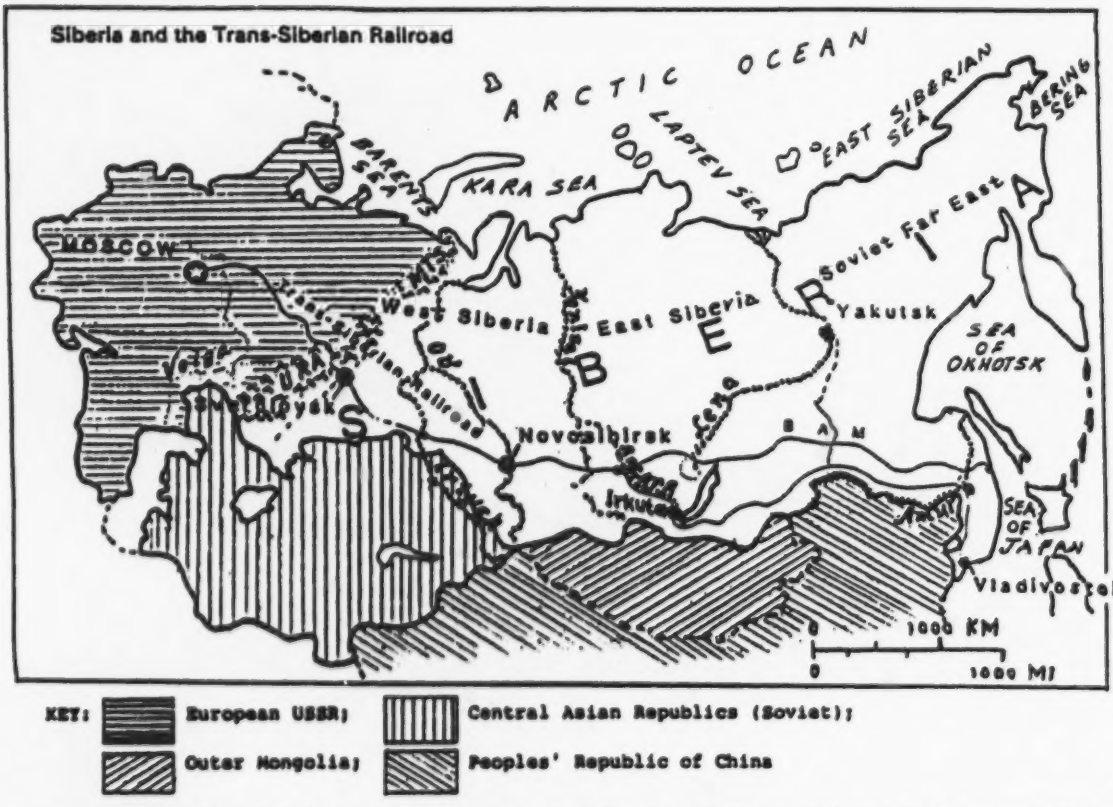
30. In Osnovniye napravleniya perestroiki vyssheg . . . obrazovaniya . . . (see note 2), p. 16.

31. From correspondence concerning praxis as of 1986 AY.

32. From correspondence concerning praxis as of 1986 AY.

33. Boborykin, A.D., "Podgotovka pedagogicheskikh kadrov dlya natsional'nykh shkol krainego severa," ("Preparation of Teachers for National Schools of the Northern Region"), in Problemy sovremennogo sotsial'nogo razvitie narodnostei severa ("Contemporary problems in the Social Development of Northern Peoples"); Novosibirsk, Nauka Press, 1987.

Figure 1.



Adapted from Fig. 2.1 in R. Swearingen et al: Siberia and the Soviet Far East; Hoover Institution Press, 1987; pg. 42.